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FEDERAL - STATE - PRIVATE
COOPERATIVE SNOW SURVEYS

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PROCUREMENT SECTION
CURRENT SERIAL RECORDS

WATER SUPPLY OUTLOOK FOR MONTANA

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

MONTANA AGRICULTURAL EXPERIMENT STATION

Data included in this report were obtained by the agencies named above in cooperation with Federal, State, and private organizations listed on the inside back cover of this report.

SNOW PILLOW RECORDS
1971 WATER YEAR

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters of key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



WATER SUPPLY OUTLOOK FOR MONTANA

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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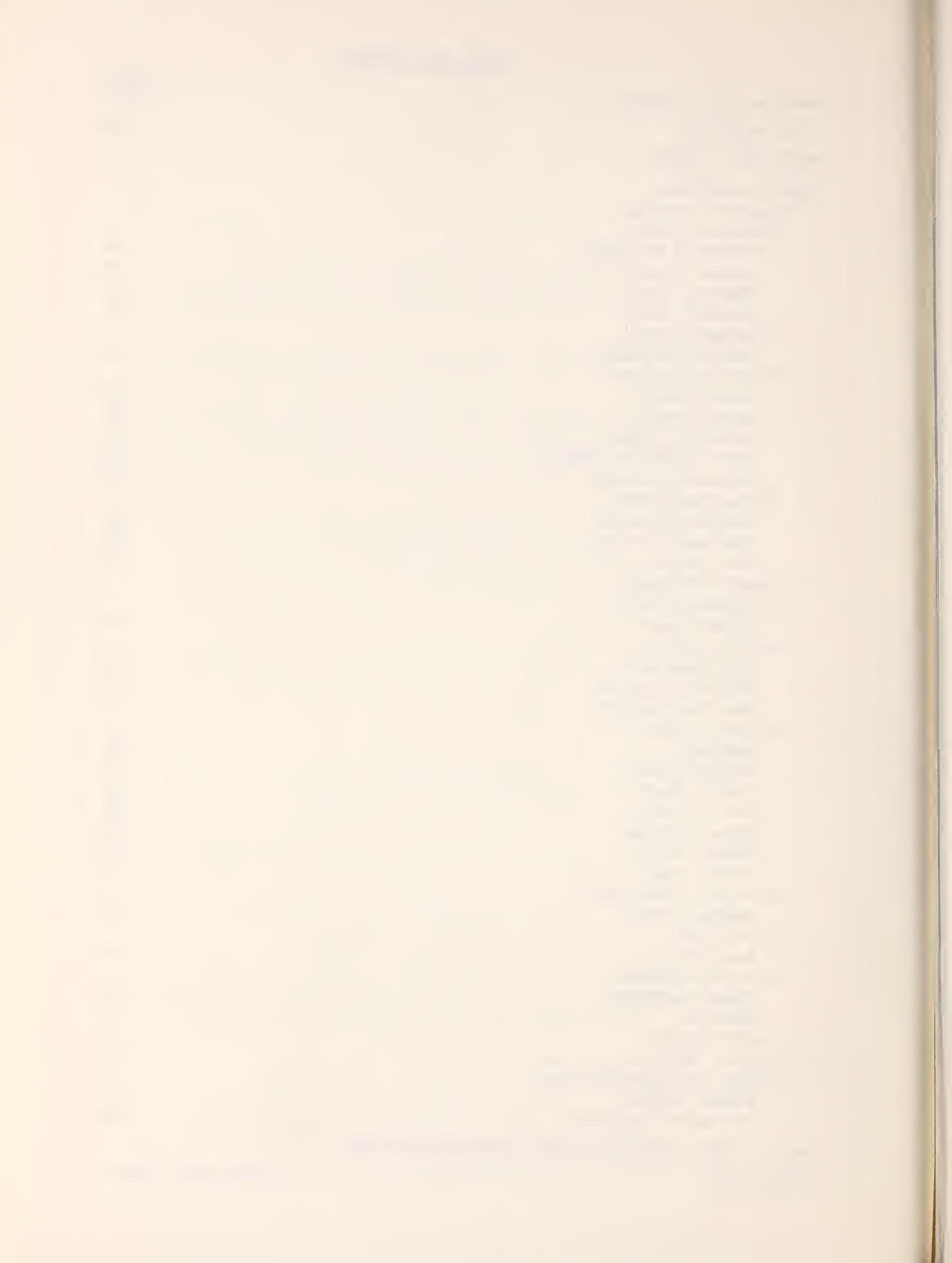
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MONTANA FALL SUMMARY
October 1, 1971

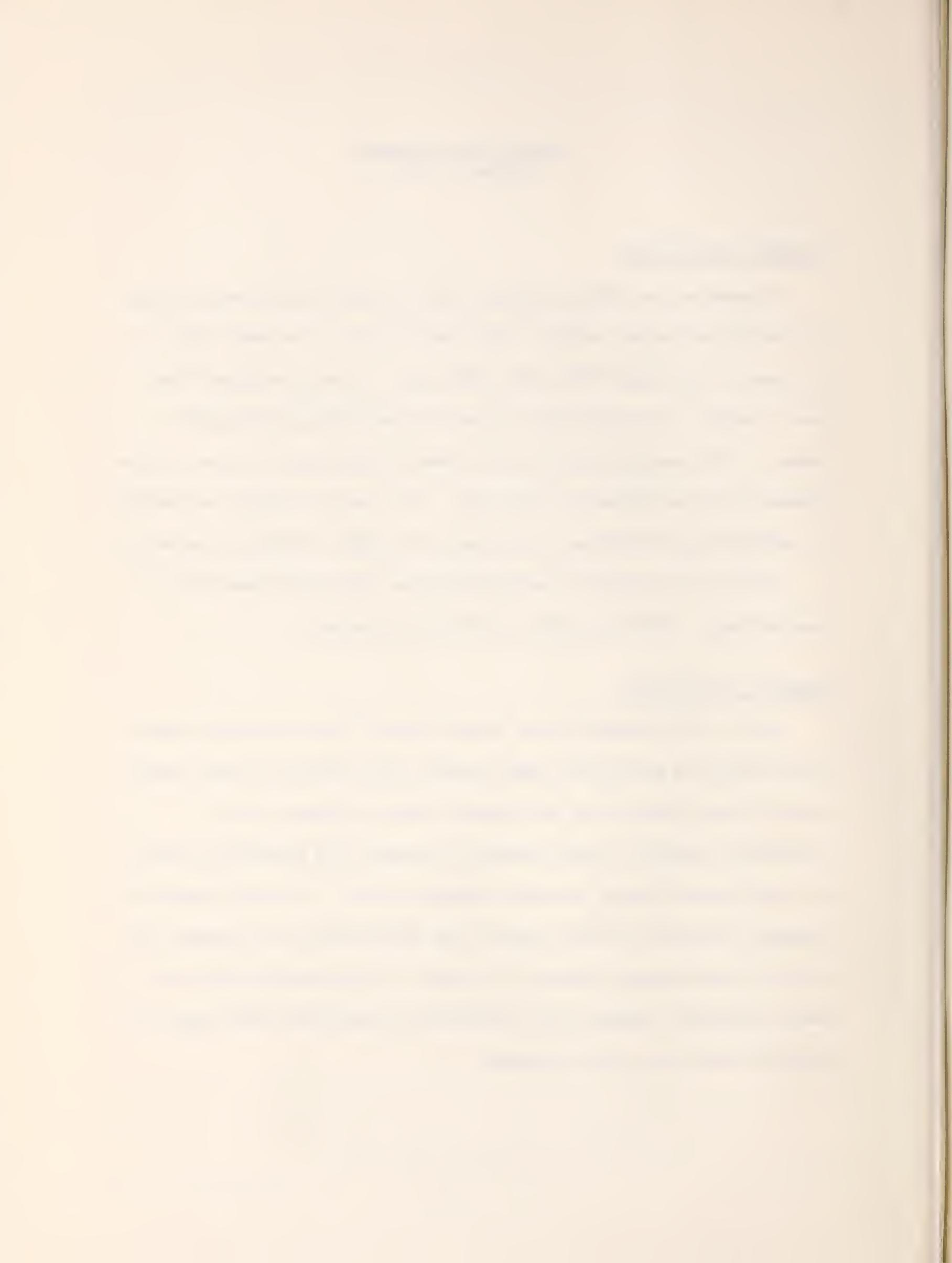
COLUMBIA RIVER BASIN

Streamflow was above average in the Columbia River Basin during the spring and summer months, with the exception of a small area in the head of the Clark Fork River where near to below average flows were observed. Precipitation was well below average during late summer. This was reflected by low flows during August on some of the streams with low elevation headwaters. The heavy snowpack was helpful in maintaining streamflow on streams with higher elevation headwaters.

Storage in irrigation and multipurpose reservoirs generally is near average. Mountain soils are drier than normal.

MISSOURI RIVER BASIN

Much of the Missouri River Basin had well above average streamflow during the spring and summer months, with record or near record amounts being observed in the Missouri River headwater area. Streamflow dropped to near average on streams with headwaters along the Continental Divide, near the Canadian border. The high elevation snowpack sustained the low summer flows sufficiently to overcome the lack of precipitation during late summer. This enabled most crops to mature normally; however, low increases in production were noted in dryland areas not under irrigation.

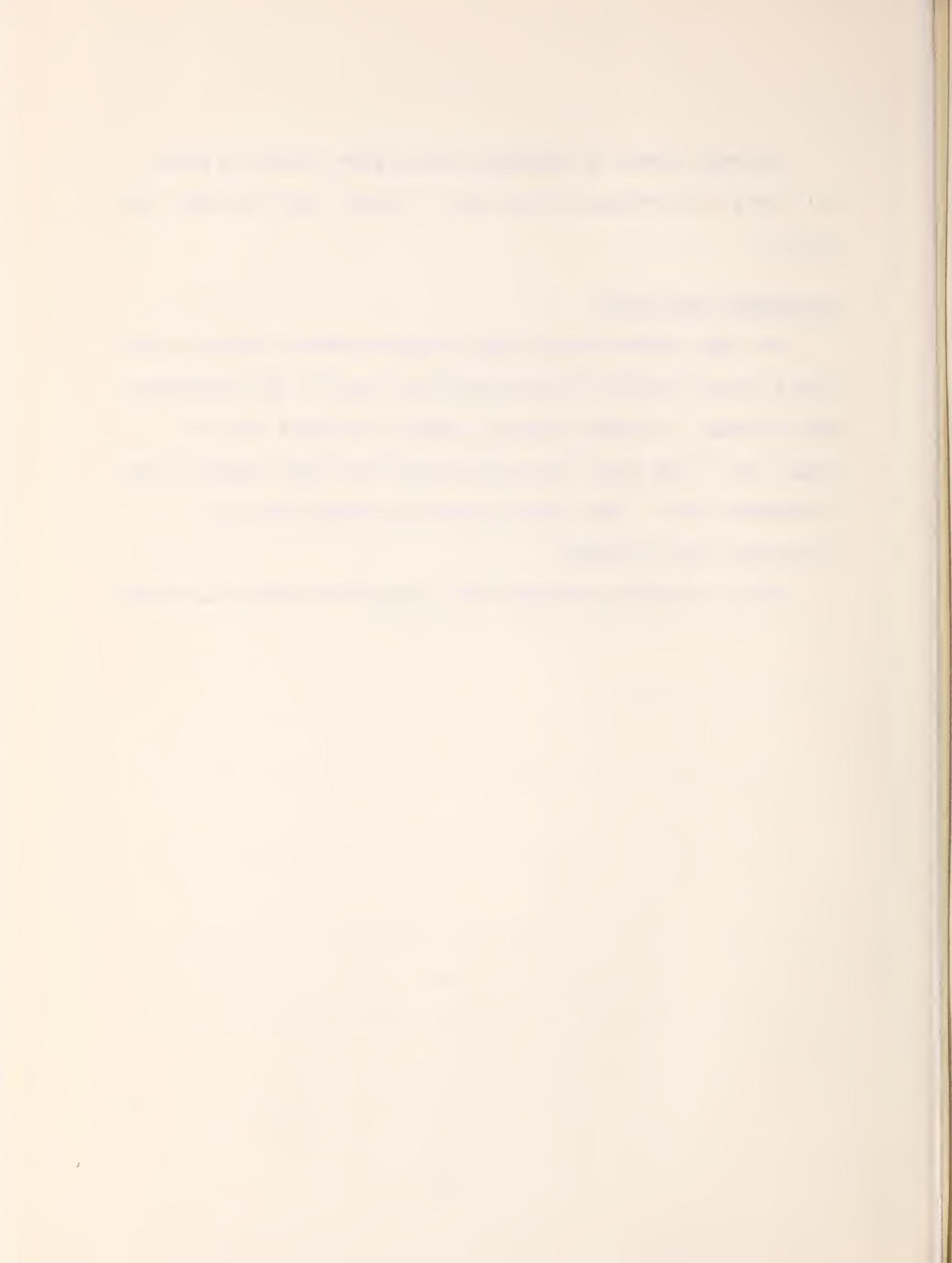


Reservoir storage is generally near or above average on nearly all rivers in the Missouri River Basin. Mountain soils are drier than normal.

YELLOWSTONE RIVER BASIN

The large runoff from the heavy snowpack produced record or near record amounts during the spring and summer months in the Yellowstone River Drainage. The high elevation snowpack sustained the late summer flow. Late summer precipitation was well below average in the Yellowstone Basin. Areas under irrigation sustained the most significant water shortages.

Valley and median elevation soils are generally drier than normal.



SOIL MOISTURE

JULY 1, 1971

DRAINAGE BASIN and/or STATION		Profile (Inches)		Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity		This Year	Last Year	Average +

COLUMBIA RIVER BASINKootenai

Baree Trail	3800	48	7.5	6/30	6.6	3.6	5.0
Murphy Lake R. S.	3000	48	22.6	7/01	19.9	19.2	20.4
Raven R. S.	3050	48	23.0	6/30	14.7	21.0	19.4

Flathead

Desert Mountain	5600	54	8.4	7/01	9.6	8.8	8.5
Marias Pass	5250	54	6.5	6/28	6.0	5.5	5.3

Clark Fork

Black Pine	7100	48	10.0	7/01	8.7	9.8	8.9
Lubrecht Forest	4100	48	26.8	-	-	-	-
Seeley Lake R. S.	4030	48	11.9	-	-	-	-
Skalkaho Summit	7260	48	10.8	6/29	10.0	10.2	10.2

Bitterroot

Gibbons Pass	7100	48	7.1	6/25	6.7	6.6	6.4
Lolo Pass	5250	48	10.6	6/29	9.9	10.0	9.6

MISSOURI RIVER BASINBeaverhead

Lakeview	6700	48	15.3	7/01	16.2	15.8	13.2
----------	------	----	------	------	------	------	------

Madison

West Yellowstone	6700	48	6.5	6/27	3.1	2.8	-
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Gallatin

Bridger Bowl	7250	48	17.0	7/08	16.4	16.4	16.3
College Site No. 2	4856	54	17.7	7/02	13.4	12.2	12.9
Lick Creek	6860	48	18.8	7/07	17.5	16.6	-
Twenty-One Mile	7150	48	10.0	6/22	9.7	9.0	8.6

Missouri Main Stem

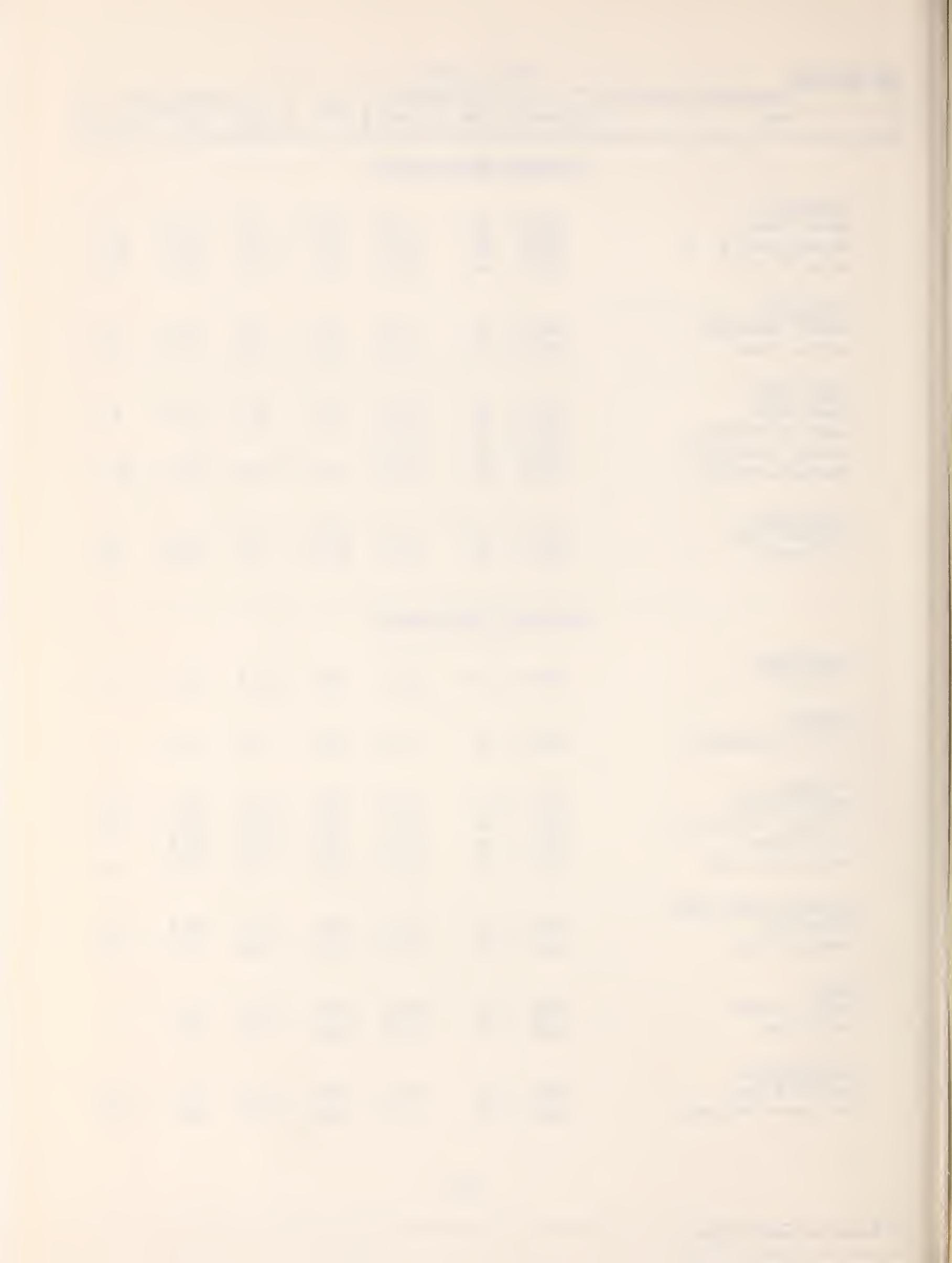
Kings Hill	7420	48	11.8	6/30	10.5	10.8	10.8
Stemple Pass	6350	48	5.9	6/29	4.8	5.5	5.2

Milk

Beaver Creek	3950	48	20.9	6/30	10.0	12.6	-
Rocky Boy	4700	36	10.0	6/30	9.0	9.7	-

Yellowstone

Battle Ridge	6020	48	17.6	7/08	16.4	14.5	15.0
Northeast Entrance	7350	48	9.4	6/25	7.7	8.2	9.2



SOIL MOISTURE

AUGUST 1, 1971

DRAINAGE BASIN and/or STATION		Profile (Inches)		Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity		This Year	Last Year	Average +

COLUMBIA RIVER BASINKootenai

Baree Trail	3800	48	7.5	8/01	4.1	-	3.8
Murphy Lake R. S.	3000	48	22.6	8/02	19.0	18.8	18.9
Raven R. S.	3050	48	23.0	8/01	13.2	-	-

Flathead

Desert Mountain	5600	54	8.4	8/02	6.7	7.9	6.4
Marias Pass	5250	54	6.5	7/26	4.8	4.4	3.9

Clark Fork

Black Pine	7100	48	10.0	7/29	8.0	9.2	8.7
Lubrecht Forest	4100	48	26.8		-	-	-
Seeley Lake R. S.	4030	48	11.9		-	-	-
Skalkaho Summit	7260	48	10.8	7/29	10.5	10.6	10.3

Bitterroot

Gibbons Pass	7100	48	7.1	7/27	4.3	5.7	5.2
Lolo Pass	5250	48	10.6	7/27	5.9	6.5	5.9

MISSOURI RIVER BASINBeaverhead

Lakeview	6700	48	15.3	8/01	16.7	9.3	8.3
----------	------	----	------	------	------	-----	-----

Madison

West Yellowstone	6700	48	6.5	7/28	2.0	2.1	-
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Gallatin

Bridger Bowl	7250	48	17.0	8/04	16.0	-	-
College Site No. 2	4856	54	17.7	7/30	18.5	12.2	9.2
Lick Creek	6860	48	18.8	8/06	14.4	15.4	15.5
Twenty-One Mile	7150	48	10.0	7/28	6.6	7.2	5.4

Missouri Main Stem

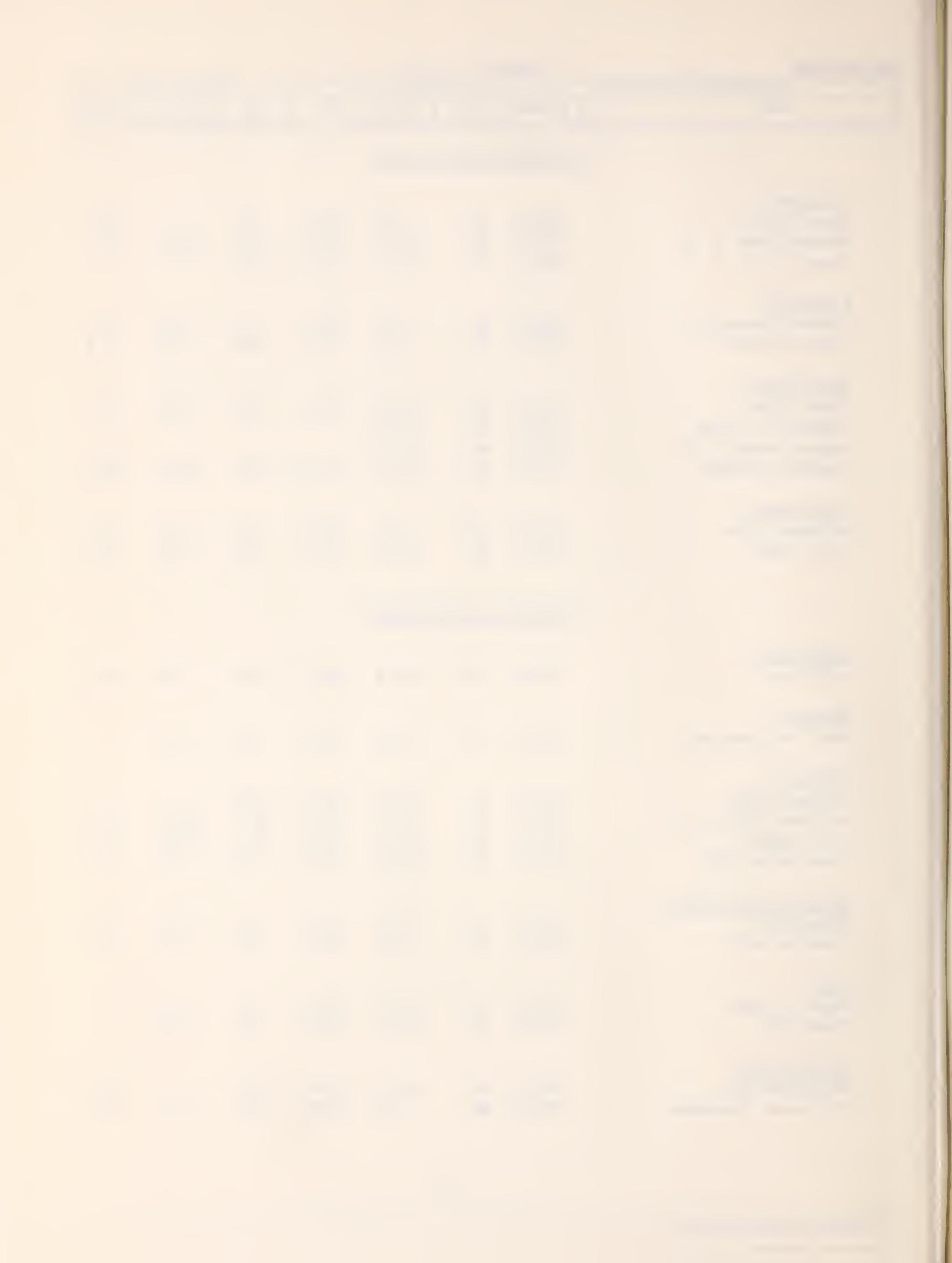
Kings Hill	7420	48	11.8	7/30	8.9	8.9	9.2
Stemple Pass	6350	48	5.9	8/02	3.4	4.2	4.2

Milk

Beaver Creek	3950	48	20.9	7/30	6.3	7.1	-
Rocky Boy	4700	36	10.1	7/30	6.7	7.9	-

Yellowstone

Battle Ridge	6020	48	17.6	8/04	12.8	-	11.2
Northeast Entrance	7350	48	9.4	8/03	5.5	6.3	6.8



SOIL MOISTURE

SEPTEMBER 1, 1971

DRAINAGE BASIN and/or STATION		Profile (Inches)		Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity		This Year	Last Year	Average +

COLUMBIA RIVER BASINKootenai

Baree Trail	3800	48	7.5	9/01	5.5	-	4.6
Murphy Lake R. S.	3000	48	22.6	9/01	18.5	18.2	18.9
Raven R. S.	3050	48	23.0	9/01	13.2	-	-

Flathead

Desert Mountain	5600	54	8.4	8/30	4.8	4.8	5.2
Marias Pass	5250	54	6.5	8/29	3.8	3.7	3.5

Clark Fork

Black Pine	7100	48	10.0	8/31	7.8	8.0	8.2
Lubrecht Forest	4100	48	26.8		-	-	-
Seeley Lake R. S.	4030	48	11.9	9/01	4.2	3.9	-
Skalkaho Summit	7260	48	10.8	8/31	10.1	10.0	9.7

Bitterroot

Gibbons Pass	7100	48	7.1	8/30	2.6	2.9	4.1
Lolo Pass	5250	48	10.6	8/27	3.1	4.0	4.5

MISSOURI RIVER BASINBeaverhead

Lakeview	6700	48	15.3	9/01	14.8	7.8	6.9
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Madison

West Yellowstone	6700	48	6.5	8/31	2.6	1.2	-
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Gallatin

Bridger Bowl	7250	48	17.0	9/07	16.4	16.5	16.1
College Site No. 2	4856	54	17.7	9/03	14.1	11.2	8.6
Lick Creek	6860	48	18.8	9/10	16.6	18.0	16.4
Twenty-One Mile	7150	48	10.0	8/31	5.0	3.2	3.6

Missouri Main Stem

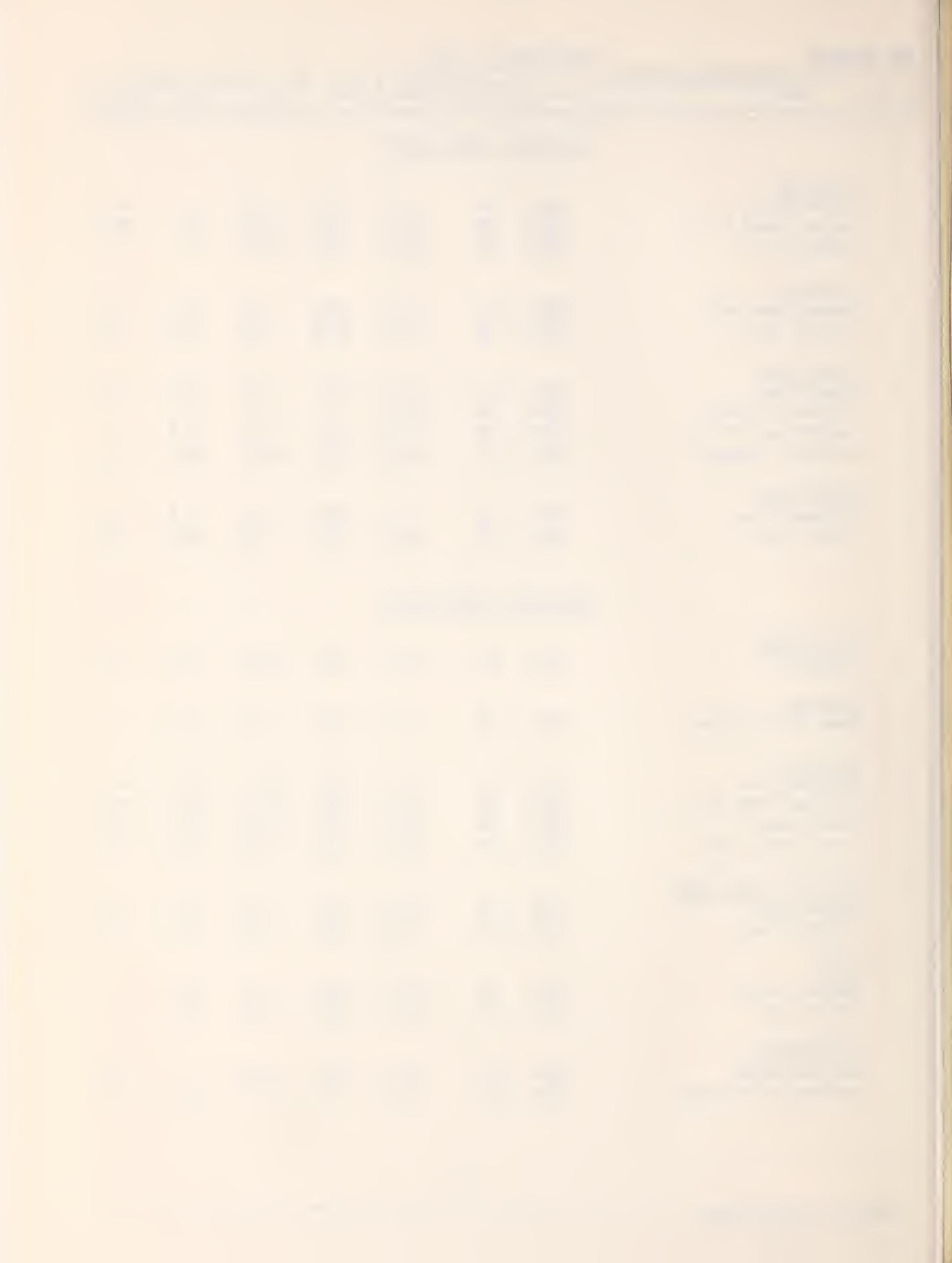
Kings Hill	7420	48	11.8	8/31	5.6	6.1	7.9
Stemple Pass	6350	48	5.9	8/31	3.1	3.6	3.9

Milk

Beaver Creek	3950	48	20.9	8/20	5.7	6.0	-
Rocky Boy	4700	36	10.1	8/31	6.2	6.7	-

Yellowstone

Battle Ridge	6020	48	17.6	9/07	8.0	-	9.5
Northeast Entrance	7350	48	9.4		-	5.0	5.7



SOIL MOISTURE

OCTOBER 1, 1971

DRAINAGE BASIN and/or STATION		Profile (Inches)		Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity		This Year	Last Year	Average +

COLUMBIA RIVER BASINKootenai

Baree Trail	3800	48	7.5	10/01	4.8	5.5	5.3
Murphy Lake R. S.	3000	48	22.6	10/04	18.4	18.3	18.6
Raven R. S.	3050	48	23.0	10/01	13.1	18.2	18.3

Flathead

Desert Mountain	5600	54	8.4	10/04	5.8	6.3	5.8
Marias Pass	5250	54	6.5	9/26	3.6	3.9	3.9

Clark Fork

Black Pine	7100	48	10.0	10/01	7.6	8.2	8.0
Lubrecht Forest	4100	48	26.8	10/04	13.3	13.4	-
Seeley Lake R. S.	4030	48	11.9	-	-	-	-
Skalkaho Summit	7260	48	10.8	10/01	9.7	10.3	10.3

Bitterroot

Gibbons Pass	7100	48	7.1	9/28	2.7	5.3	4.9
Lolo Pass	5250	48	10.6	10/01	2.9	4.2	4.9

MISSOURI RIVER BASINBeaverhead

Lakeview	6700	48	15.3	10/01	13.1	7.1	6.0
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Madison

West Yellowstone	6700	48	6.5	9/29	2.5	-	-
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Gallatin

Bridger Bowl	7250	48	17.0	9/27	15.9	16.3	15.7
College Site No. 2	4856	54	17.7	10/01	15.2	13.5	9.4
Lick Creek	6860	48	18.8	9/28	15.9	18.6	-
Twenty-One Mile	7150	48	10.0	9/29	6.2	5.2	4.0

Missouri Main Stem

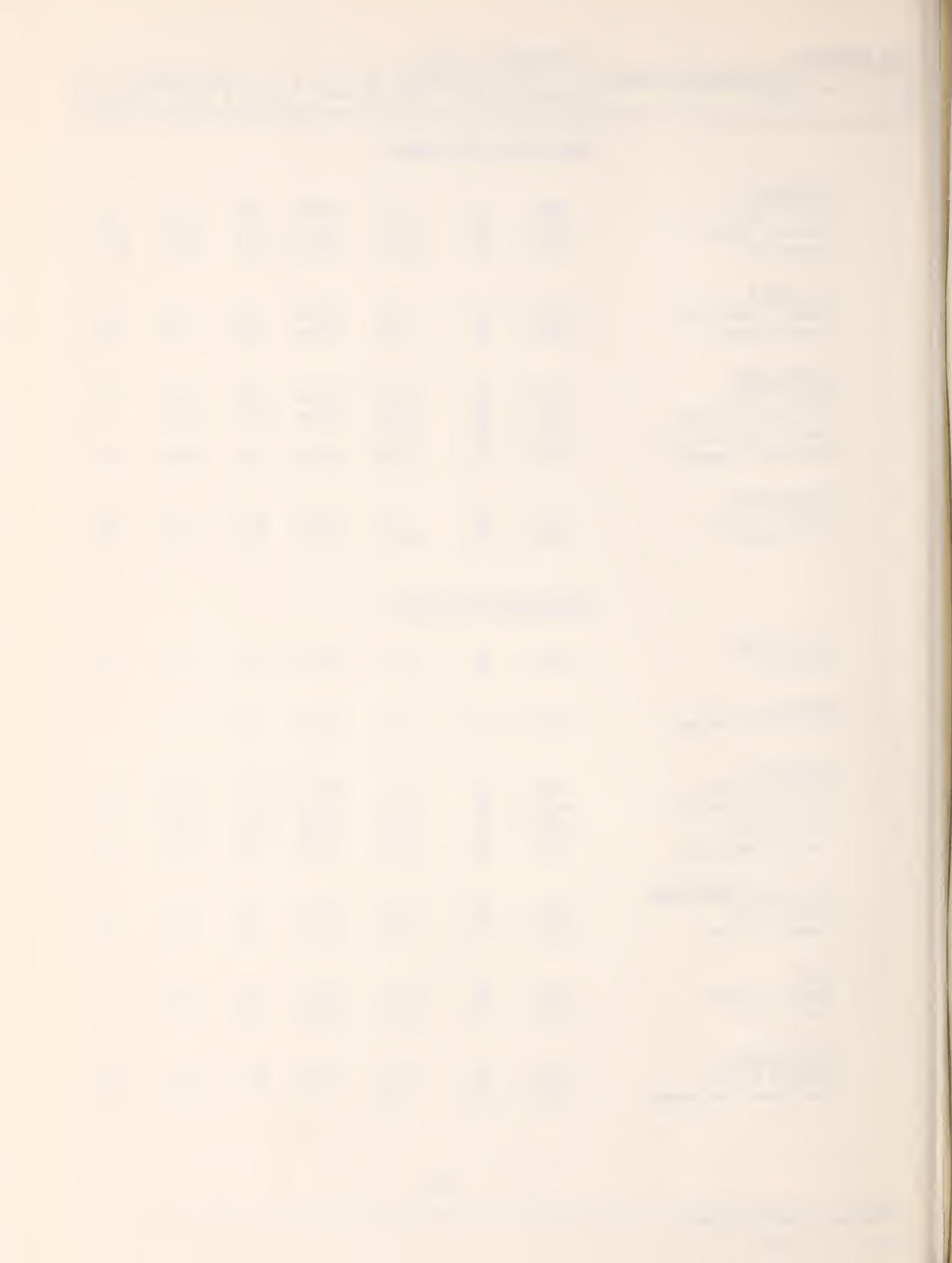
Kings Hill	7420	48	11.8	9/29	5.2	6.7	7.4
Stemple Pass	6350	48	5.9	10/01	3.8	3.5	3.8

Milk

Beaver Creek	3950	48	20.9	10/01	6.0	6.6	-
Rocky Boy	4700	36	10.1	10/01	6.2	7.9	-

Yellowstone

Battle Ridge	6020	48	17.6	9/27	8.2	12.5	10.4
Northeast Entrance	7350	48	9.4	-	6.4	6.4	-



RESERVOIR STORAGE (Thousand Acre Feet) END OF MONTH

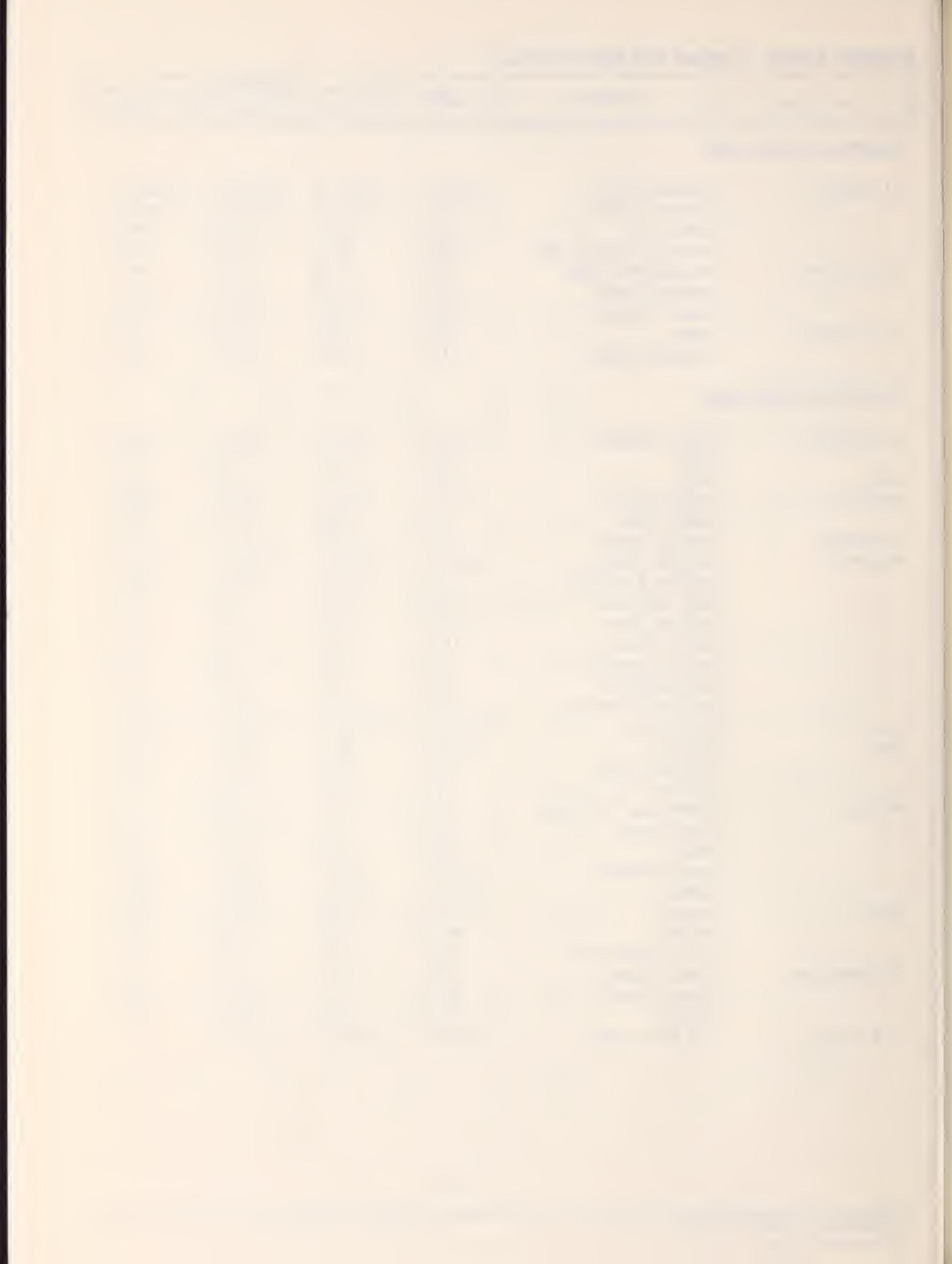
Basin or Stream	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average

COLUMBIA RIVER BASIN

Flathead	Hungry Horse	3,428.0	3,241.0	2,931.0	3,331.0
	Flathead Lake	1,791.0	1,702.0	1,694.0	1,699.0
	Camas (4)	45.2	24.2	17.8	24.9
	Mission Valley (8)	100.3	18.3	21.0	17.6
Clark Fork	Georgetown Lake	31.0	30.0	30.1	26.7
	Nevada Creek	12.6	2.6	4.1	6.5
	Noxon Rapids	334.6	320.5	328.8	321.3
Bitterroot	Como	34.9	3.8	0.4	1.9
	Painted Rocks	31.7	28.0	29.5	25.2

MISSOURI RIVER BASIN

Beaverhead	Clark Canyon	328.9	137.3	136.7	103.0
	Lima	84.0	42.7	39.2	17.3
Ruby	Ruby	38.8	13.7	9.0	8.6
Madison	Hebgen Lake	377.5	320.9	326.4	299.8
	Ennis Lake	41.0	38.4	37.4	36.5
Gallatin	Middle Creek	8.0	2.6	3.7	2.4
Missouri	Canyon Ferry	2,043.0	1,808.0	1,754.0	1,749.0
	Hauser & Helena	61.9	61.3	52.0	58.6
	Lake Helena	10.4	10.2	7.0	9.5
	Holter Lake	81.9	63.5	73.9	75.7
	Smith River	10.7	3.7	4.2	5.2
	Bair (Durand)	7.0	1.1	2.8	3.3
	Martinsdale	23.1	8.3	10.2	6.6
	Deadman's Basin	72.2	27.2	32.3	33.9
	Fort Peck	19,410.0	17,120.0	17,600.0	11,850.0
Sun	Gibson	105.0	34.5	20.1	35.5
	Willow Creek	32.3	19.5	19.7	19.0
	Pishkun	32.0	19.0	11.9	17.1
Marias	Lower Two Medicine	16.6	-	0.6	3.5
	Four Horns	19.2	-	13.3	11.0
	Swift	30.0	17.0	18.5	13.0
	Lake Frances	112.0	64.1	90.5	83.6
	Tiber	1,347.0	533.8	557.8	689.6
Milk	Fresno	127.2	37.4	73.0	67.8
	Nelson	66.8	33.9	51.0	44.1
	Lake Sherburne	66.1	7.4	3.0	7.0
Yellowstone	Mystic Lake	20.8	18.0	19.1	20.4
	Tongue River	68.0	-	27.4	20.6
	Cooney	27.5	17.3	11.1	11.0
Big Horn	Big Horn Lake	1,356.0	1,073.0	1,051.0	-



SNOW PILLOW DATA
WATER YEAR 1971

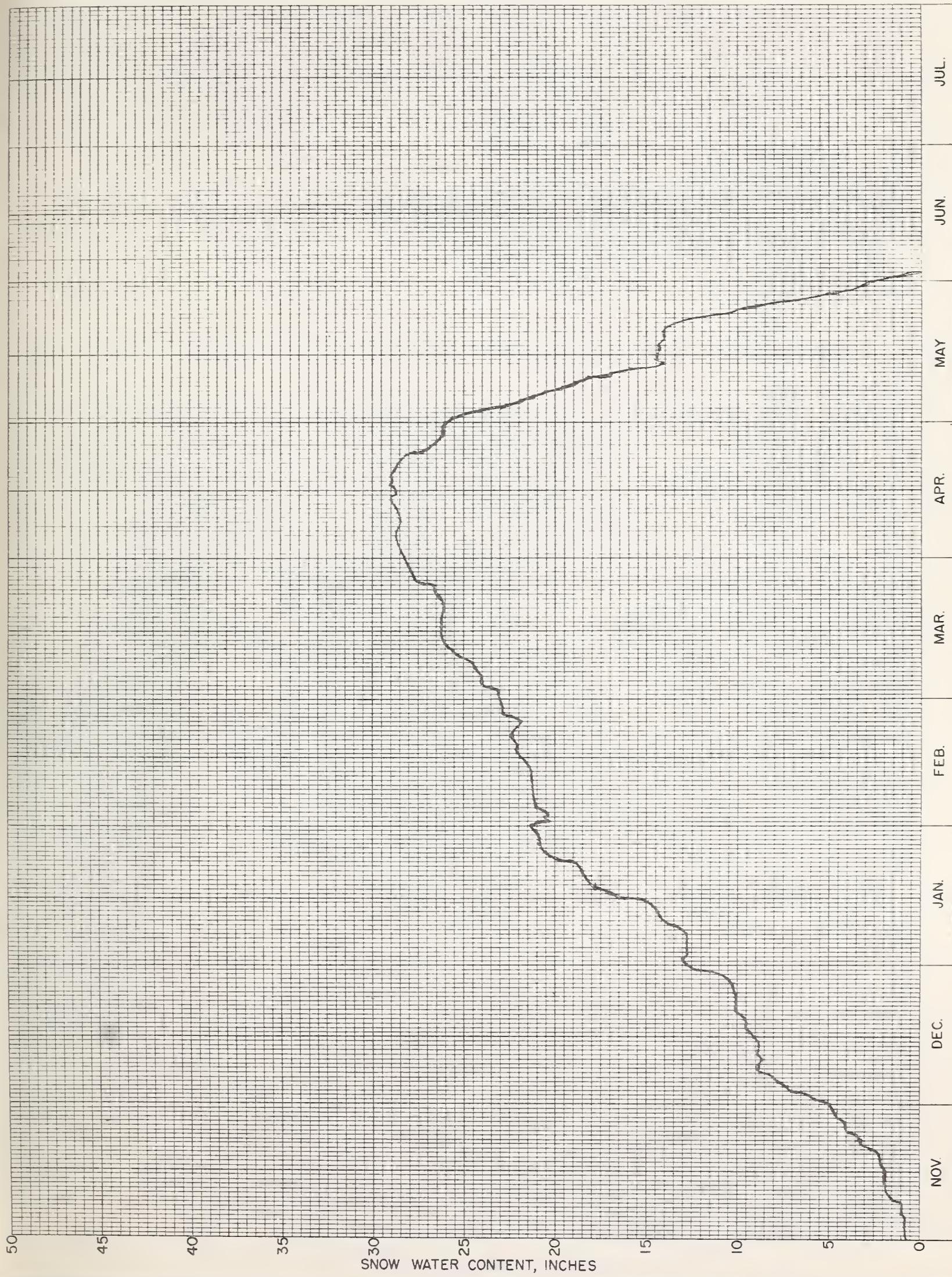
BANFIELD MOUNTAIN

No. 15A08

Elev.

5600

Drainage: Kootenai





SNOW PILLOW DATA
WATER YEAR 1971

GARVER CREEK

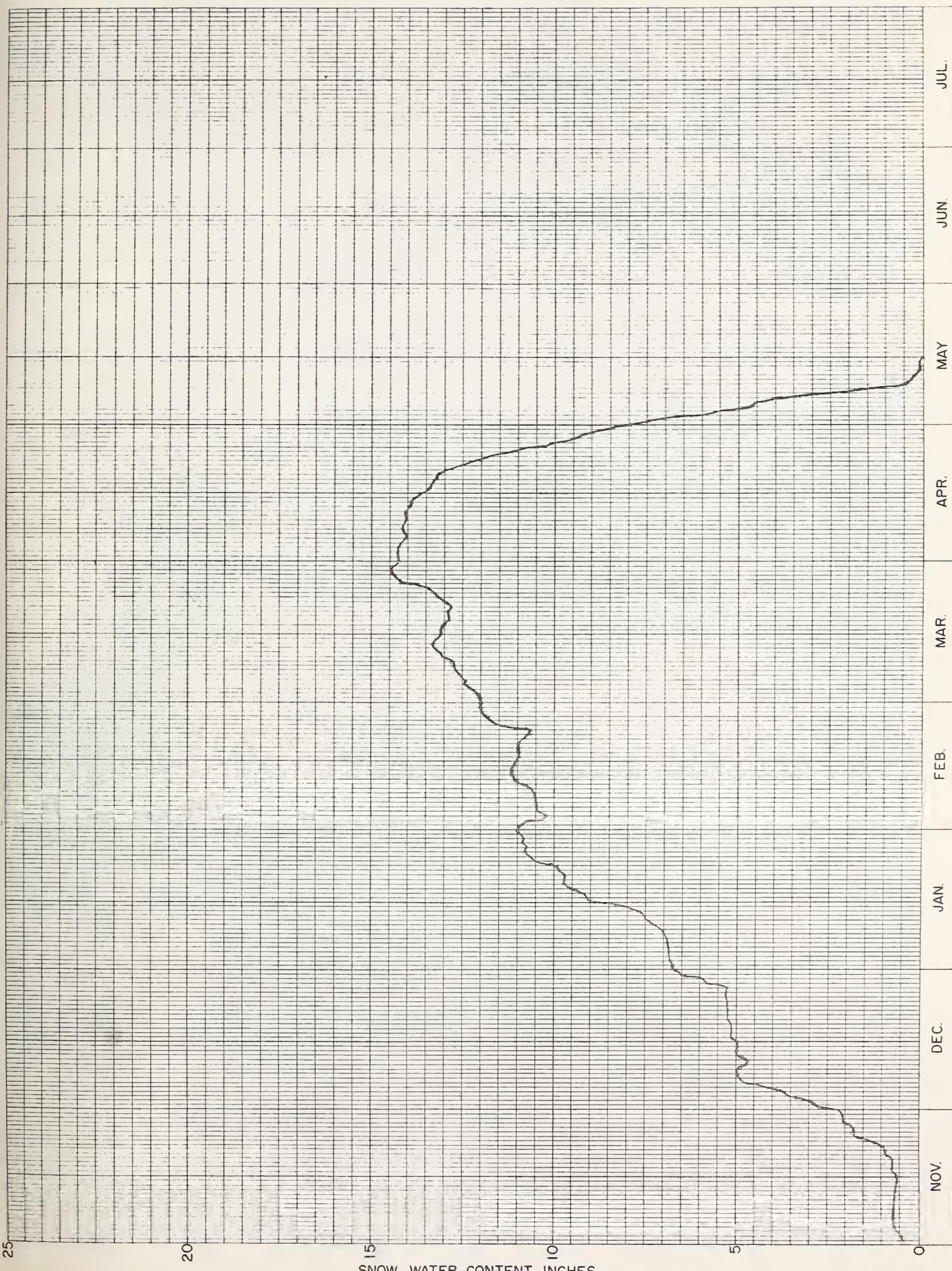
No. 15A05

Elev.

4250

Drainage.

Kootenai





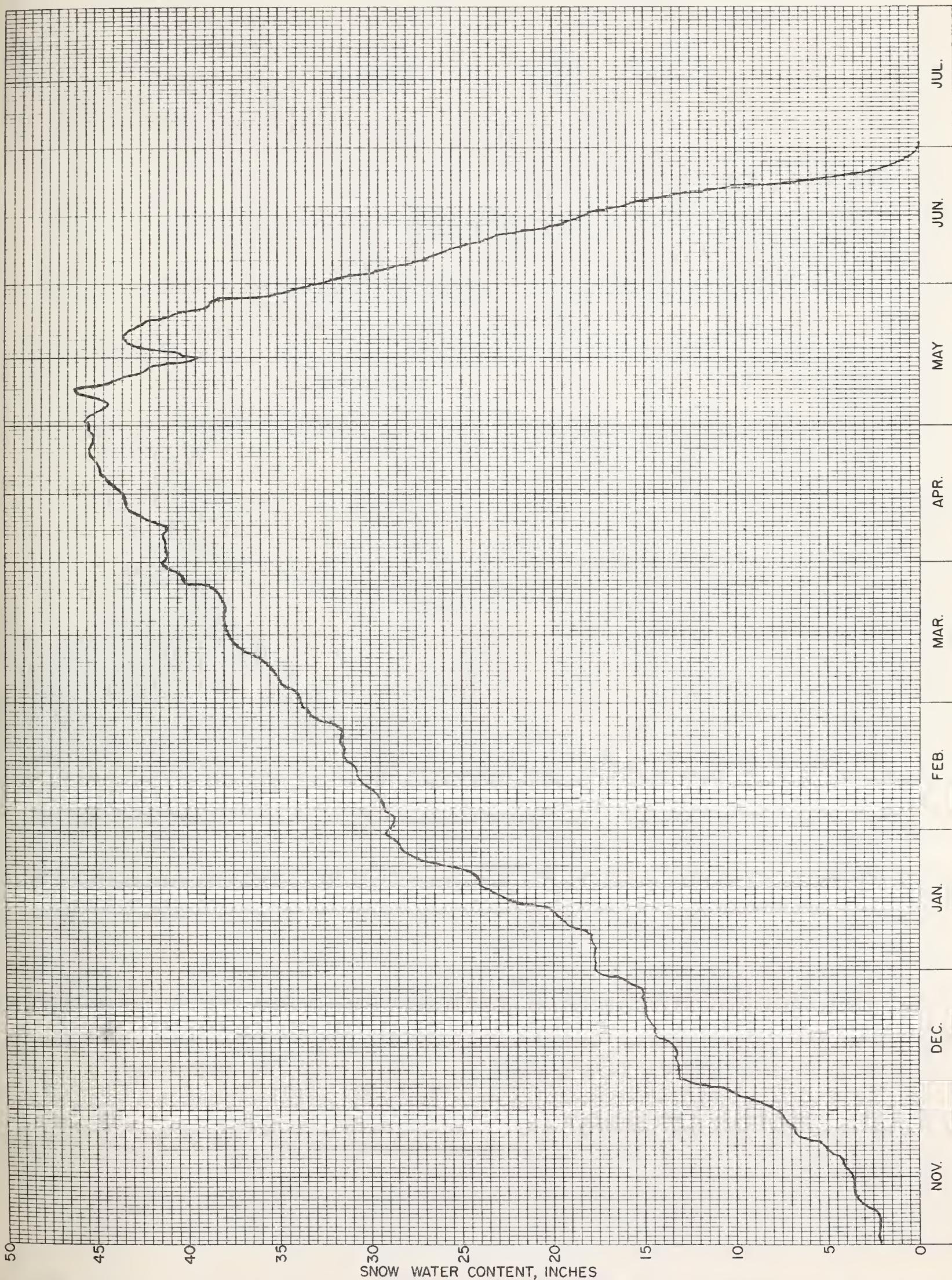
SNOW PILLOW DATA
WATER YEAR 1971

HAWKINS LAKE

No. 15A03

Elev. 6450

Drainage: Kootenai



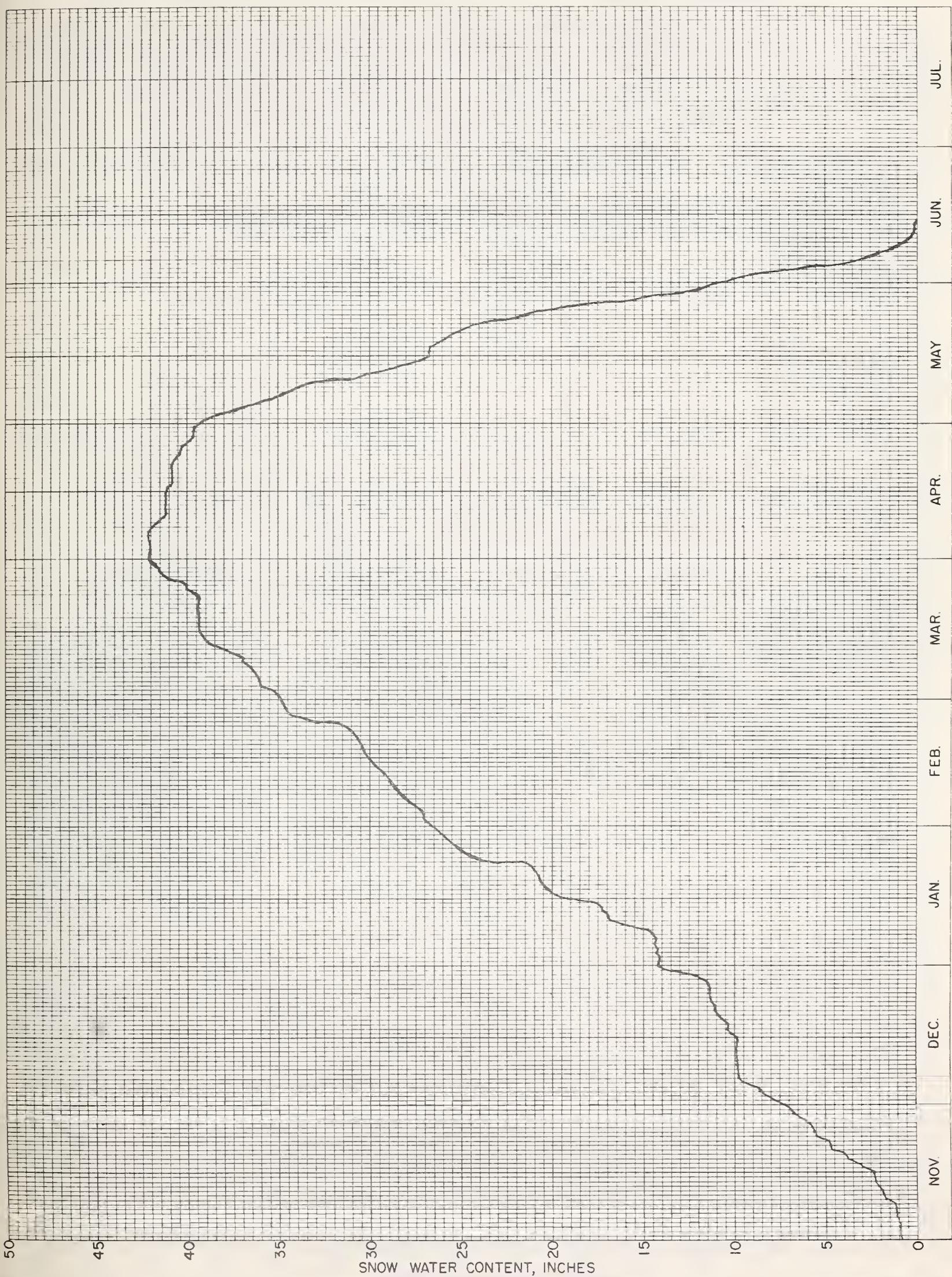
SNOW PILLOW DATA
WATER YEAR 1971

POORMAN CREEK

No. 15A12

Elev. 5100

Drainage: Kootenai





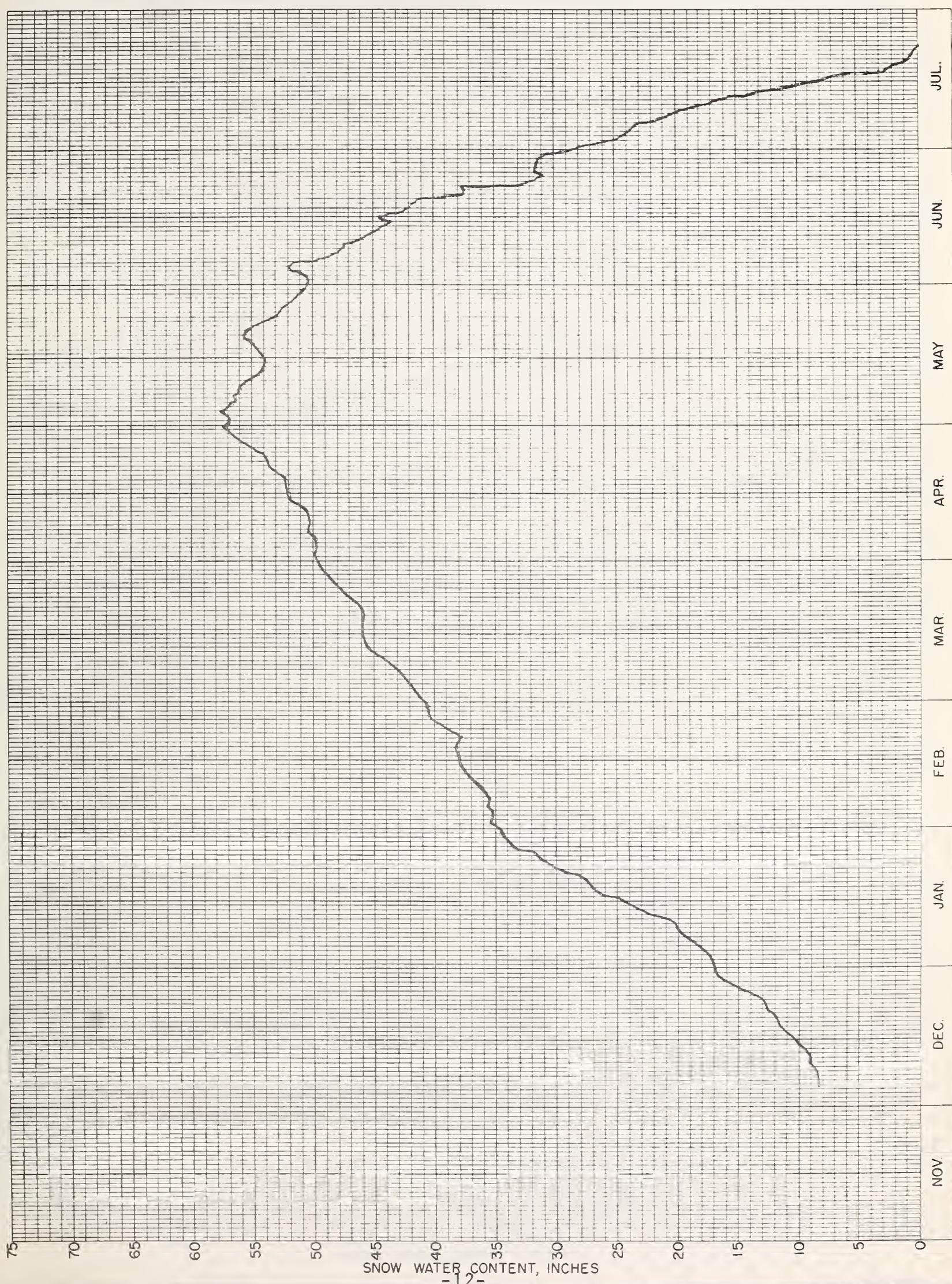
SNOW PILLOW DATA
WATER YEAR 1971

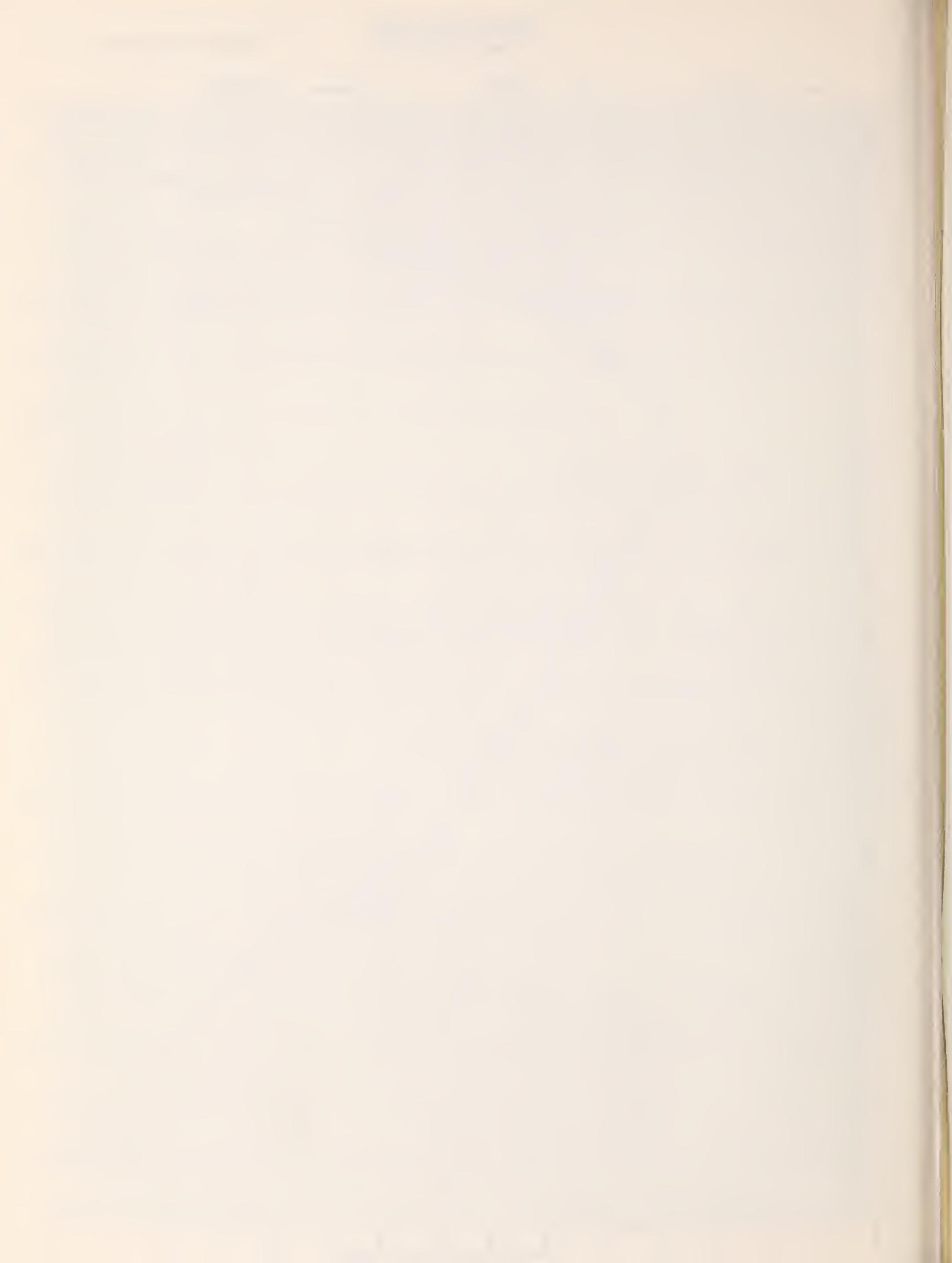
FLATTOP MOUNTAIN

No. 13A19

Elev. 6300

Drainage: Flathead





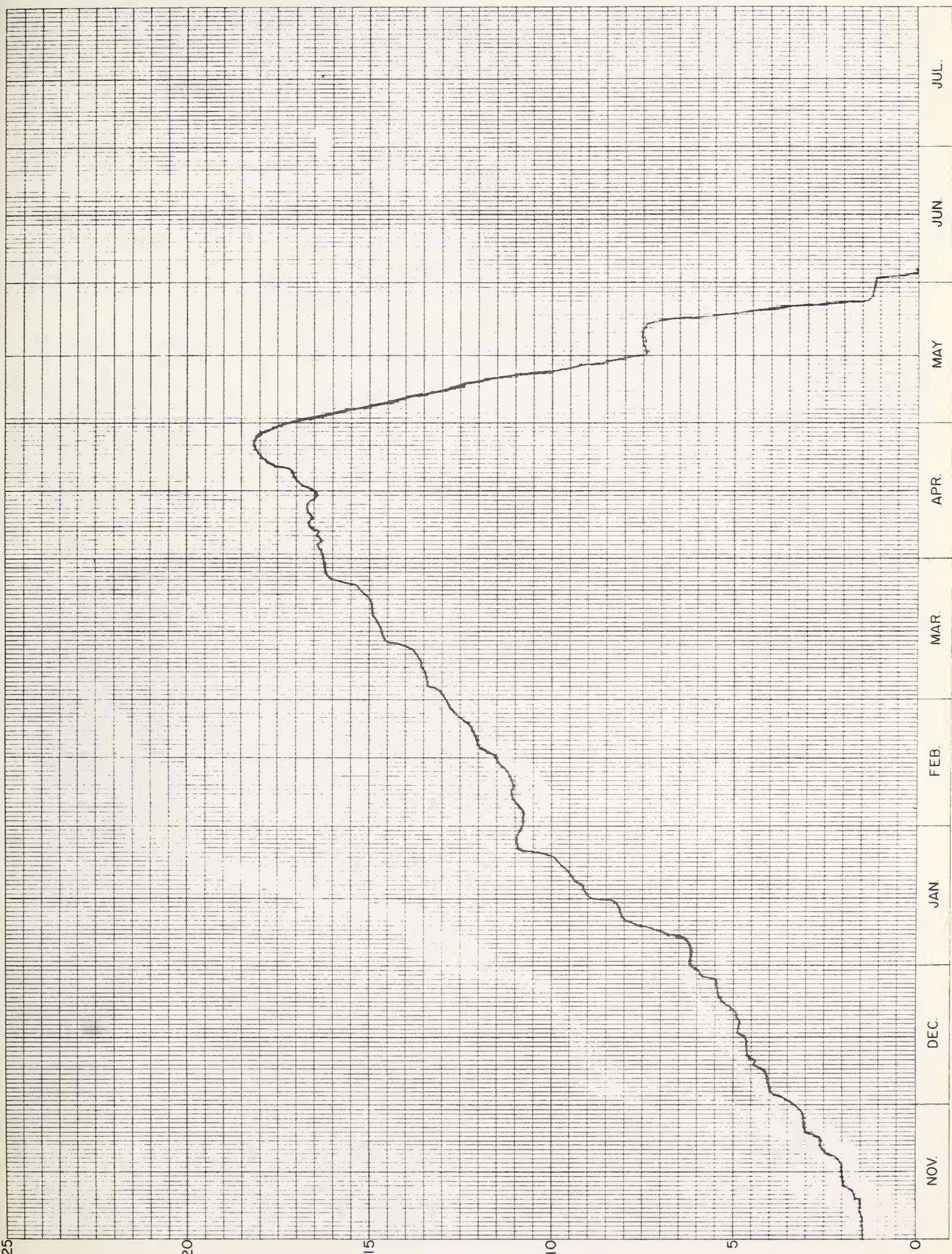
SNOW PILLOW DATA
WATER YEAR 1971

BLACK PINE

No. 13C13

Elev. 7100

Drainage. Clark Fork

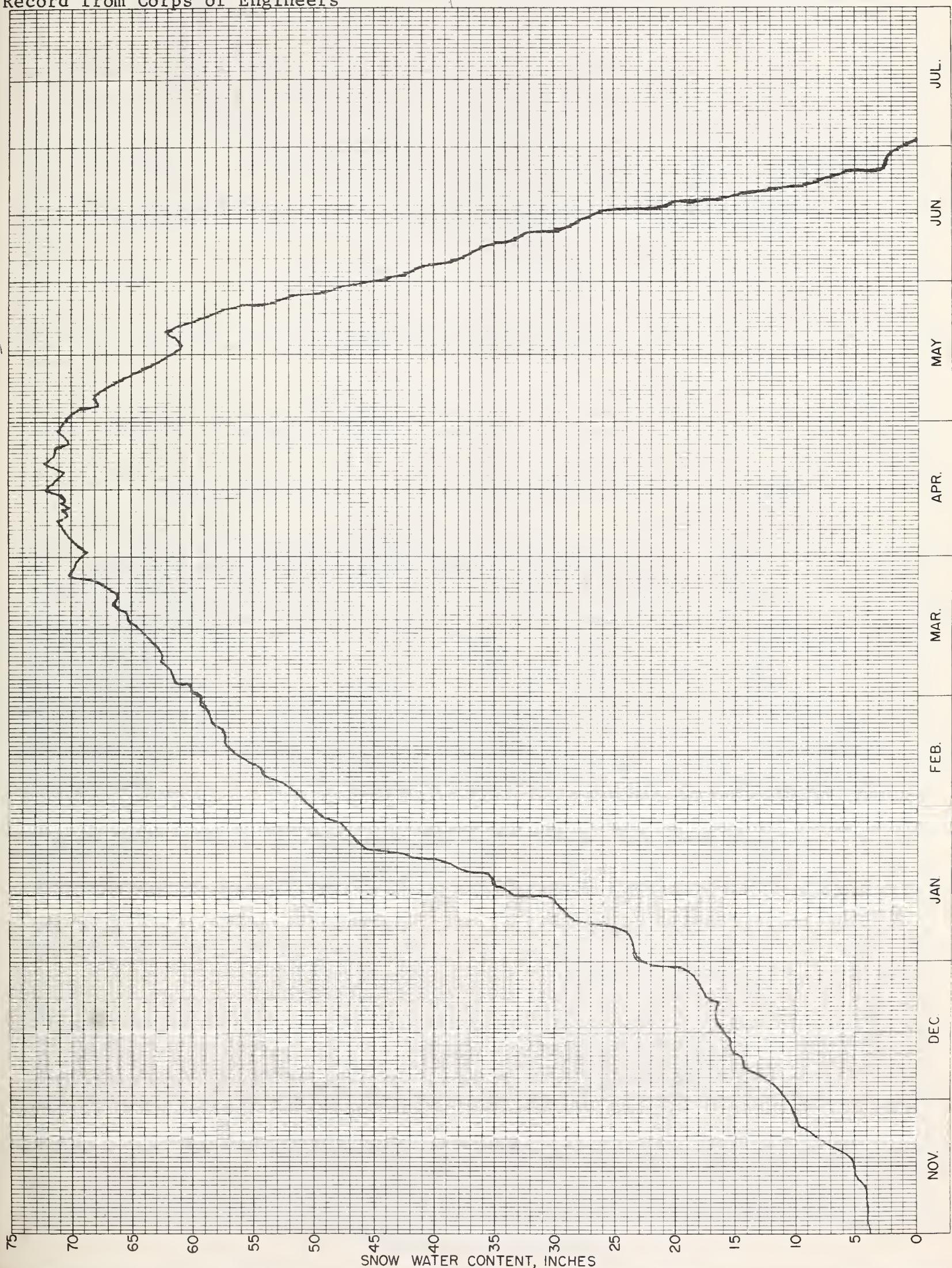




SNOW PILLOW DATA
WATER YEAR 1971

HOODOO BASIN

No. 15C10 Elev. 6000 Drainage: Clark Fork
Record from Corps of Engineers



SNOW WATER CONTENT, INCHES



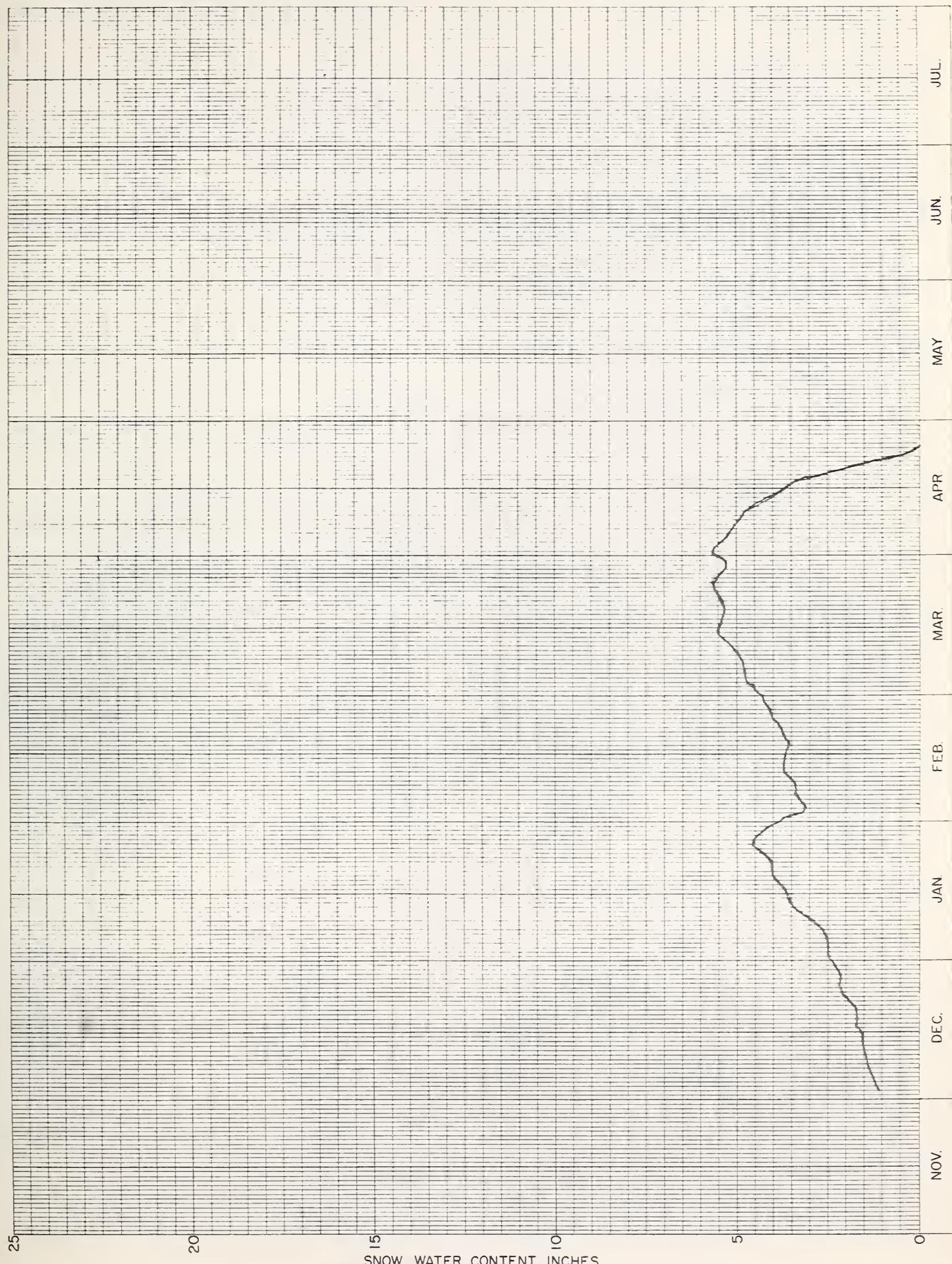
SNOW PILLOW DATA
WATER YEAR 1971

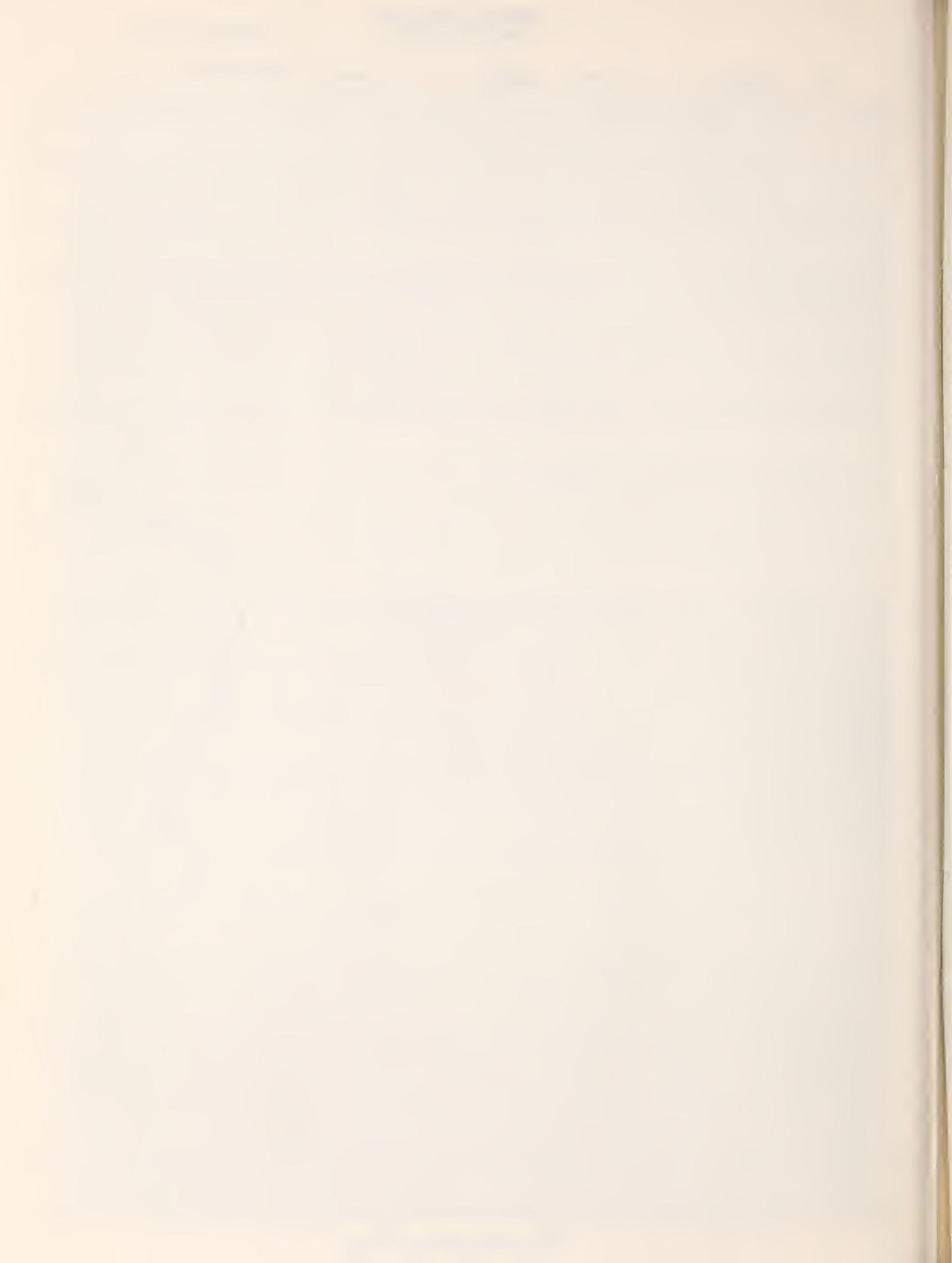
LUBRECHT FLUME

No. 13C38

Elev. 4800

Drainage. Clark Fork

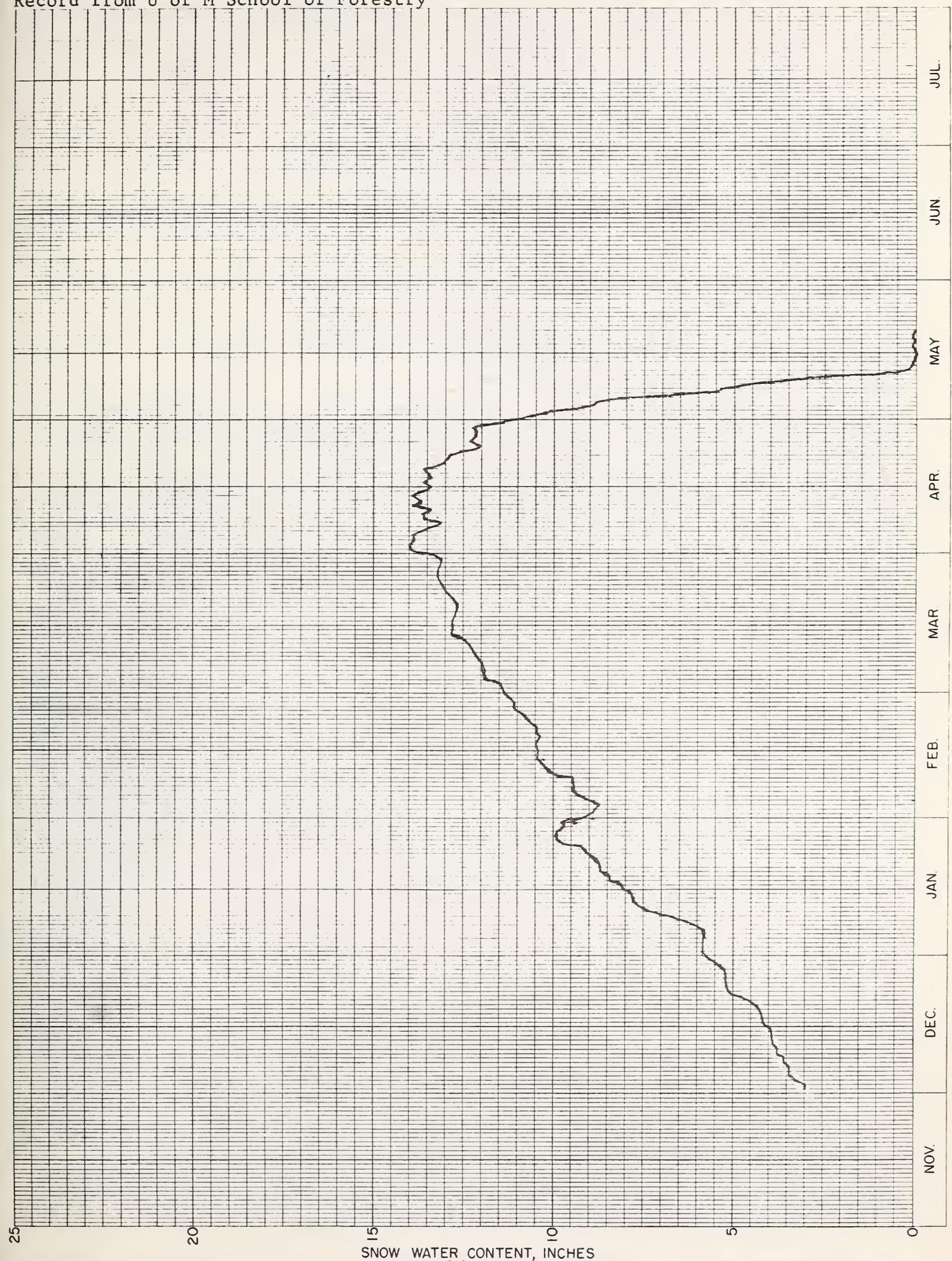


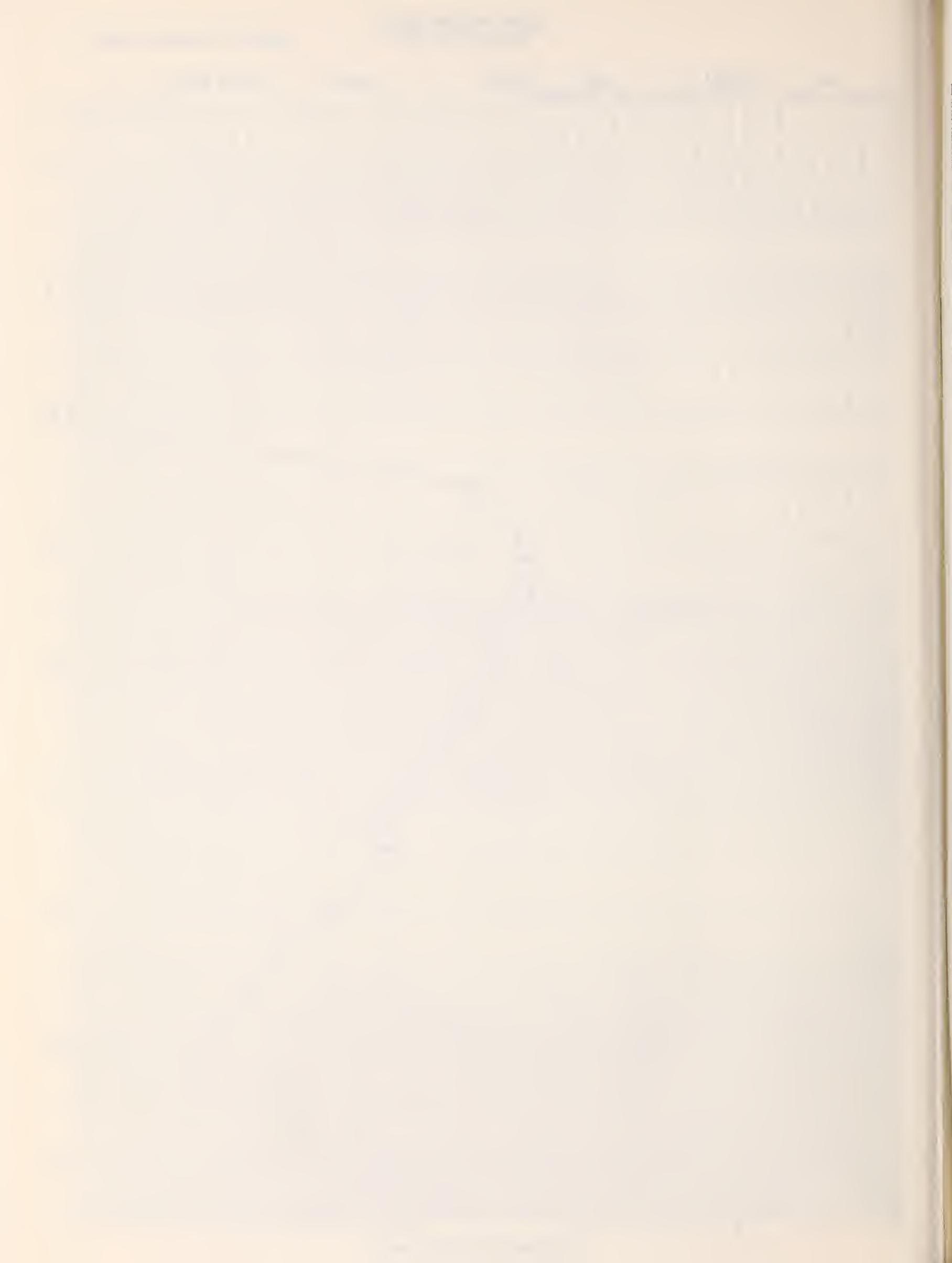


SNOW PILLOW DATA
WATER YEAR 1971

NORTH FORK ELK CREEK

No. 13C31 Elev. 6250 Drainage. Clark Fork
Record from U of M School of Forestry





SNOW PILLOW DATA
WATER YEAR 1971

PETERSON MEADOWS

No. 13C36

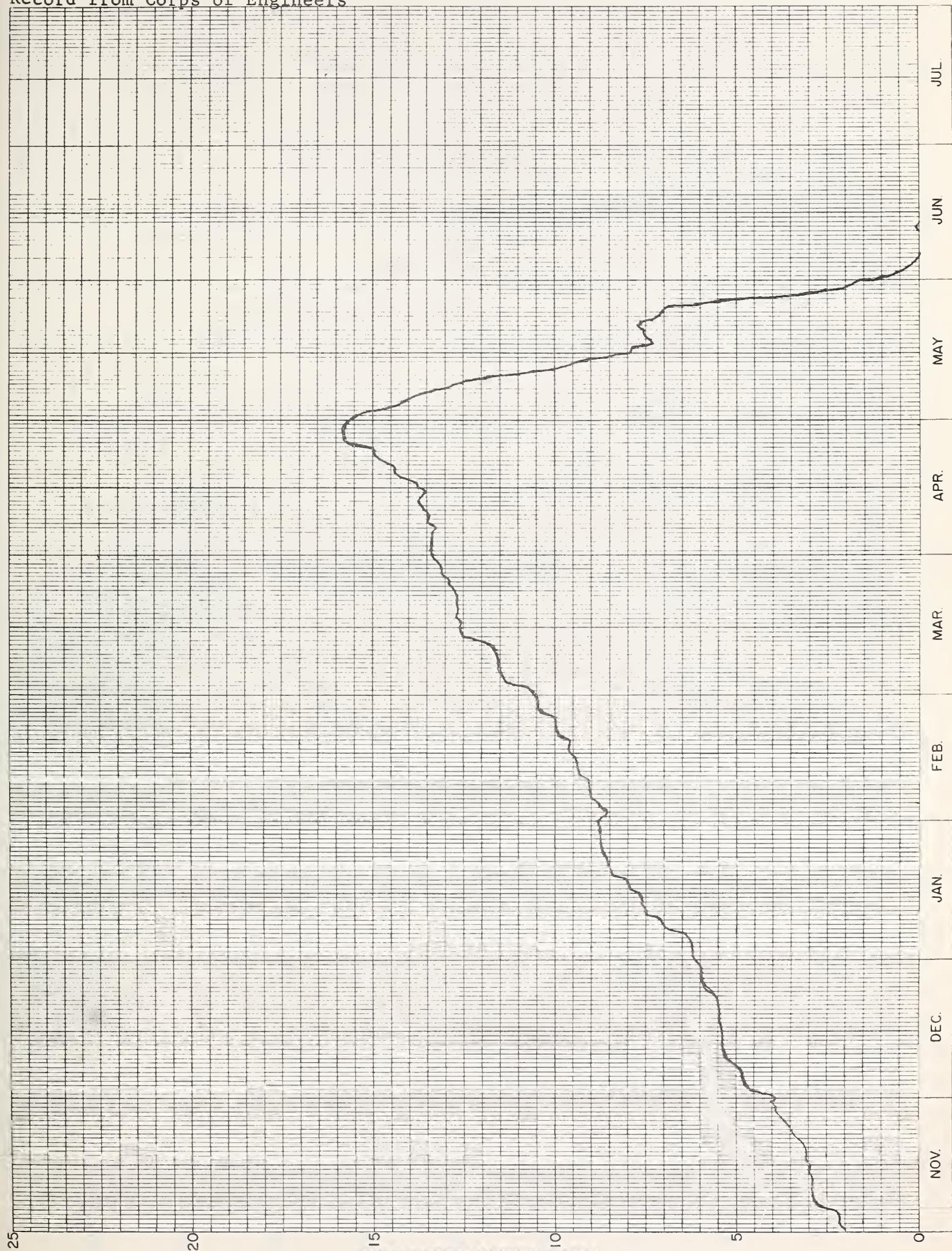
Elev.

7200

Drainage.

Clark Fork

Record from Corps of Engineers



SNOW WATER CONTENT, INCHES

SNOW PILLOW DATA
WATER YEAR 1971

SADDLE MOUNTAIN

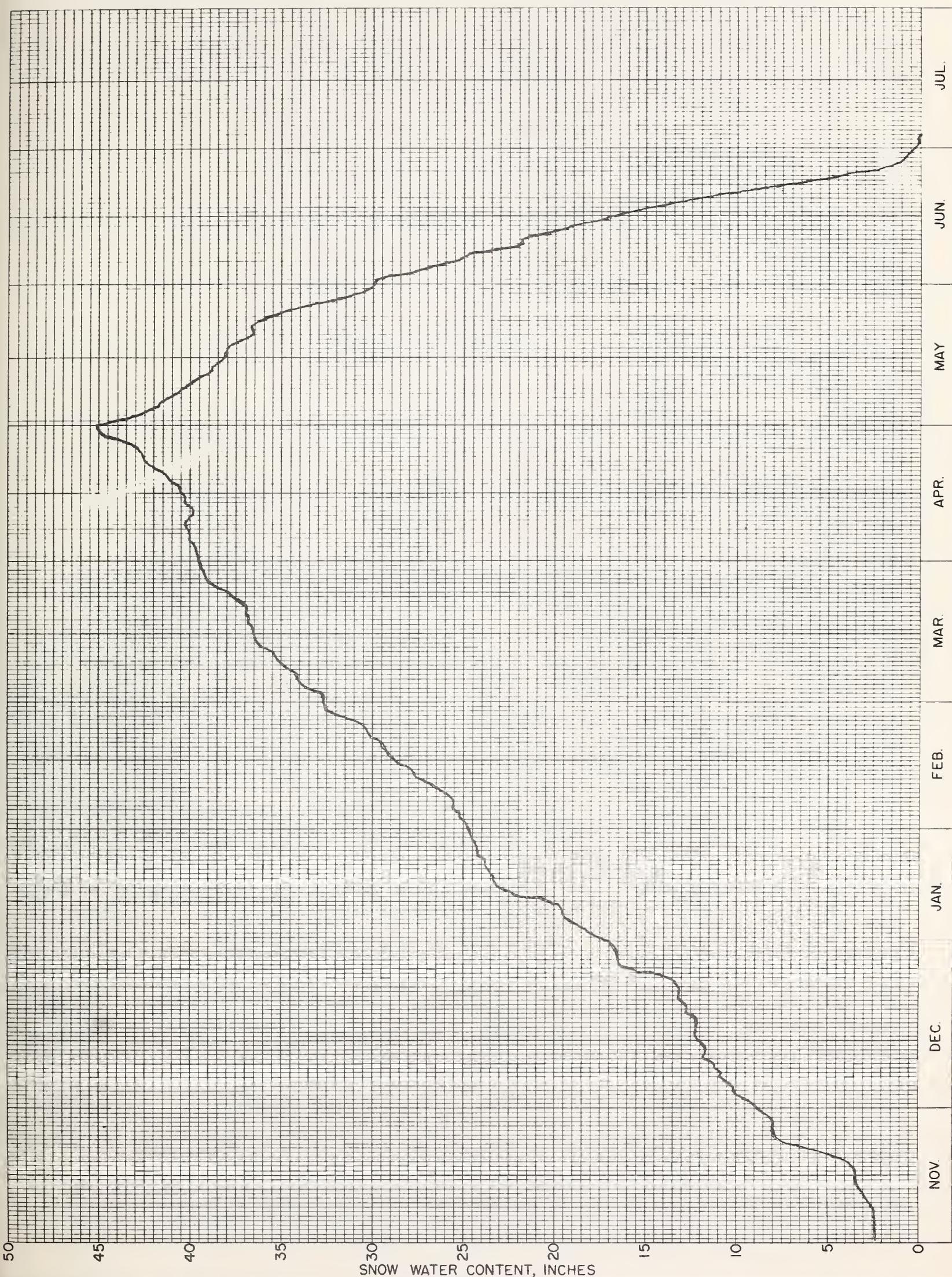
No. 13D22

Elev.

7900

Drainage:

Bitterroot





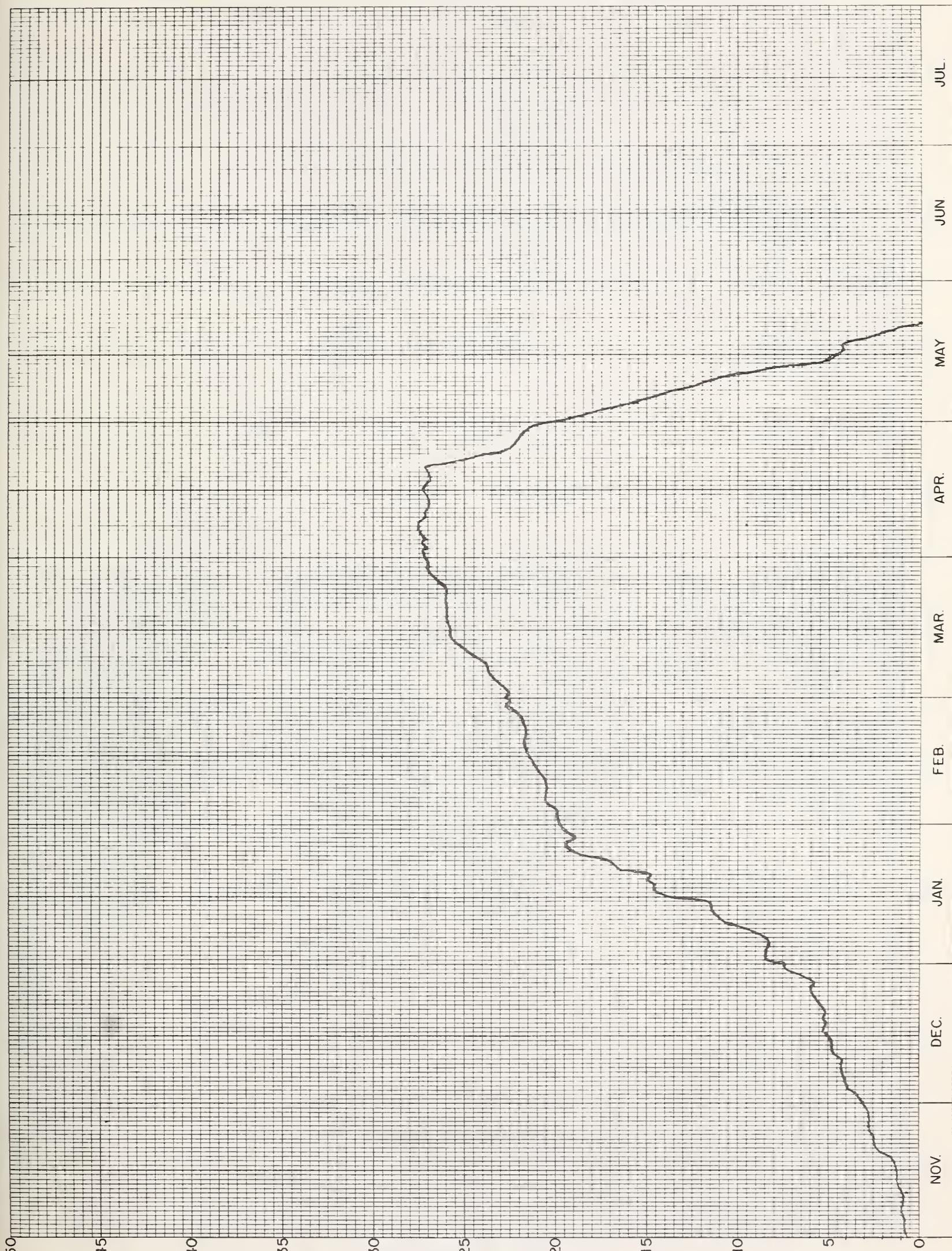
SNOW PILLOW DATA
WATER YEAR 1971

TWELVEMILE CREEK

No. 14C13

Elev. 5600

Drainage: Bitterroot



SNOW PILLOW DATA
WATER YEAR 1971

TWIN LAKES

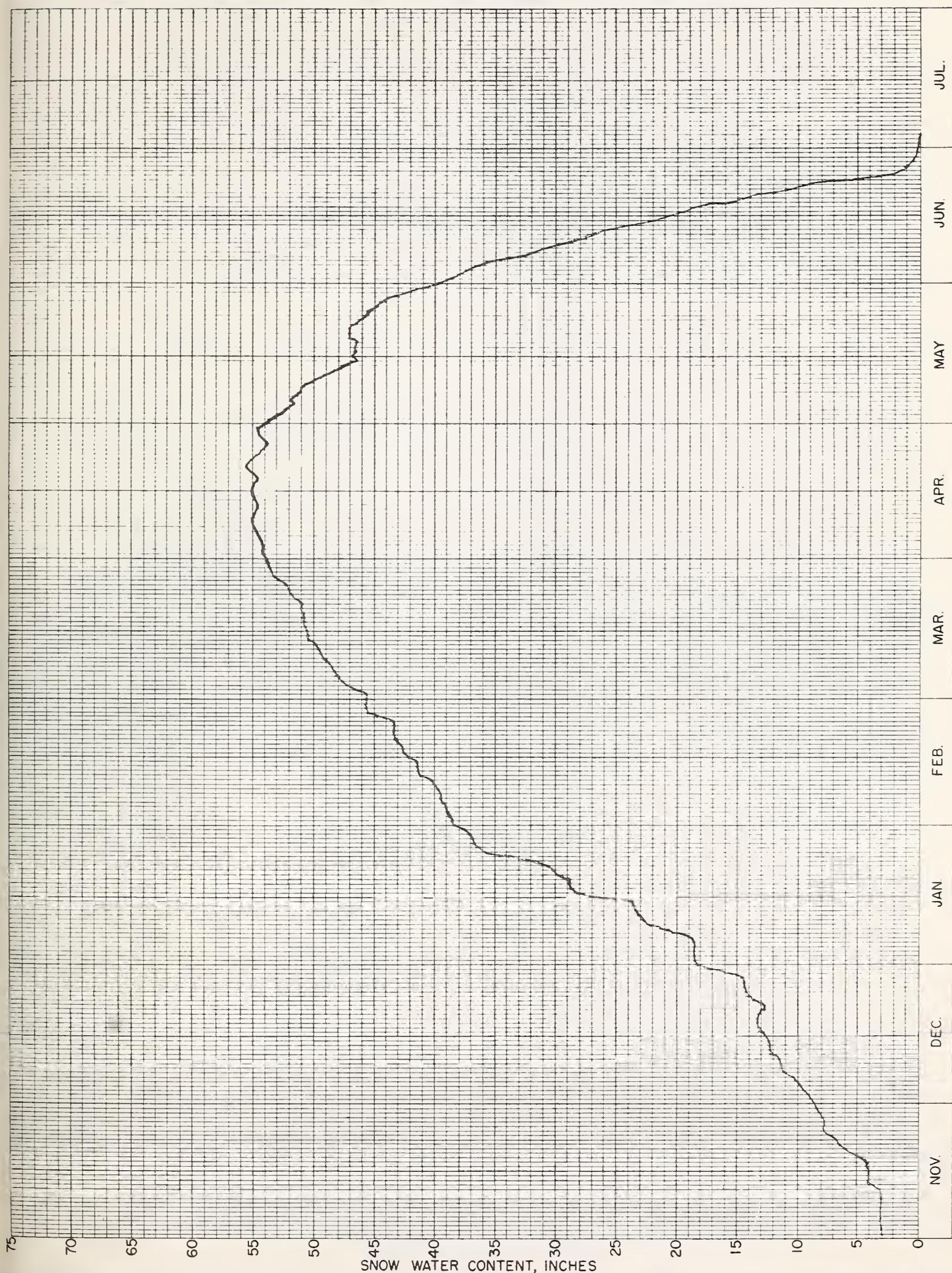
No. 14C12

Elev.

6400

Drainage:

Bitterroot



SNOW PILLOW DATA
WATER YEAR 1971

ROCKER PEAK

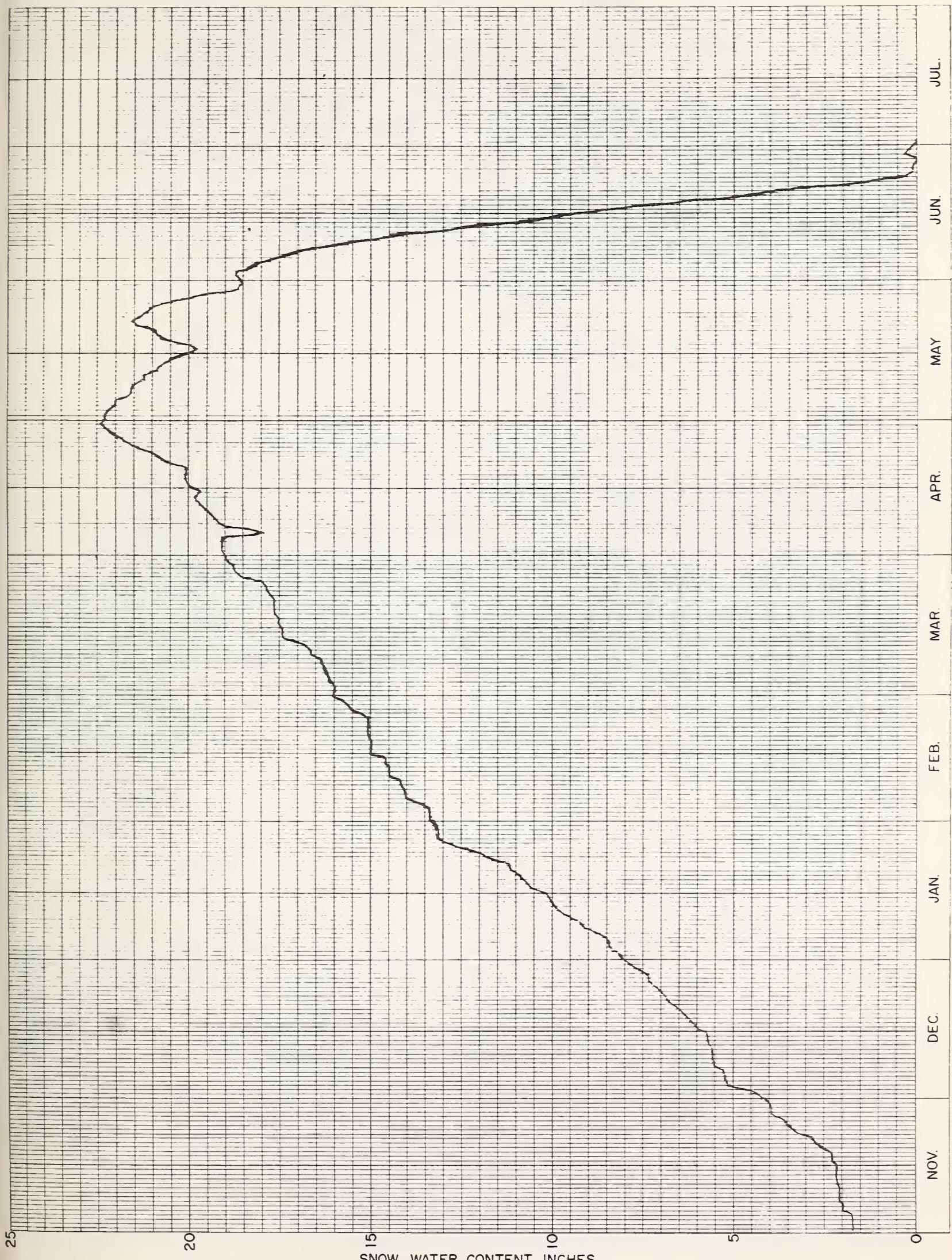
No. 12C11

Elev.

8000

Drainage.

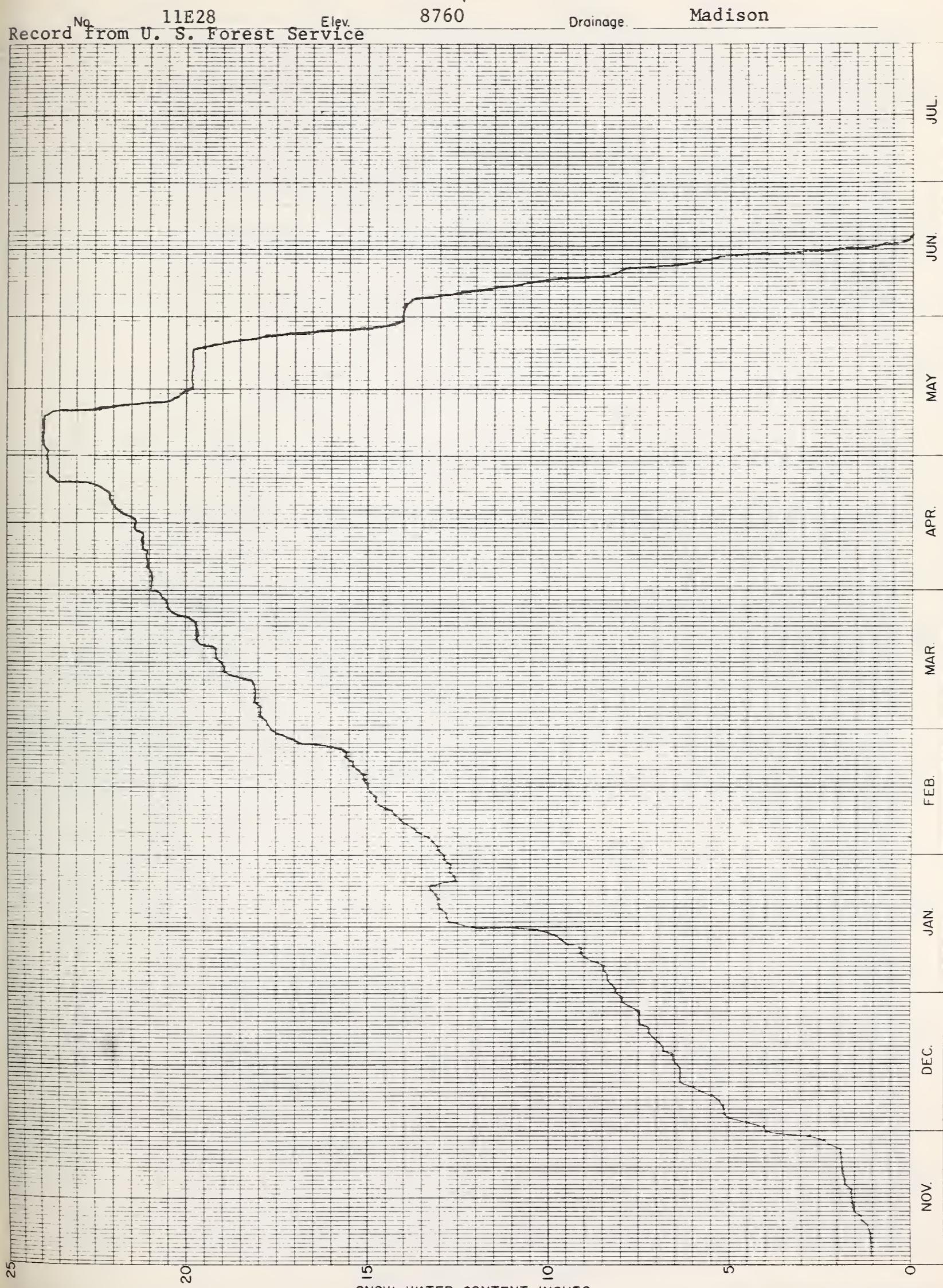
Jefferson





SNOW PILLOW DATA
WATER YEAR 1971

LION MOUNTAIN





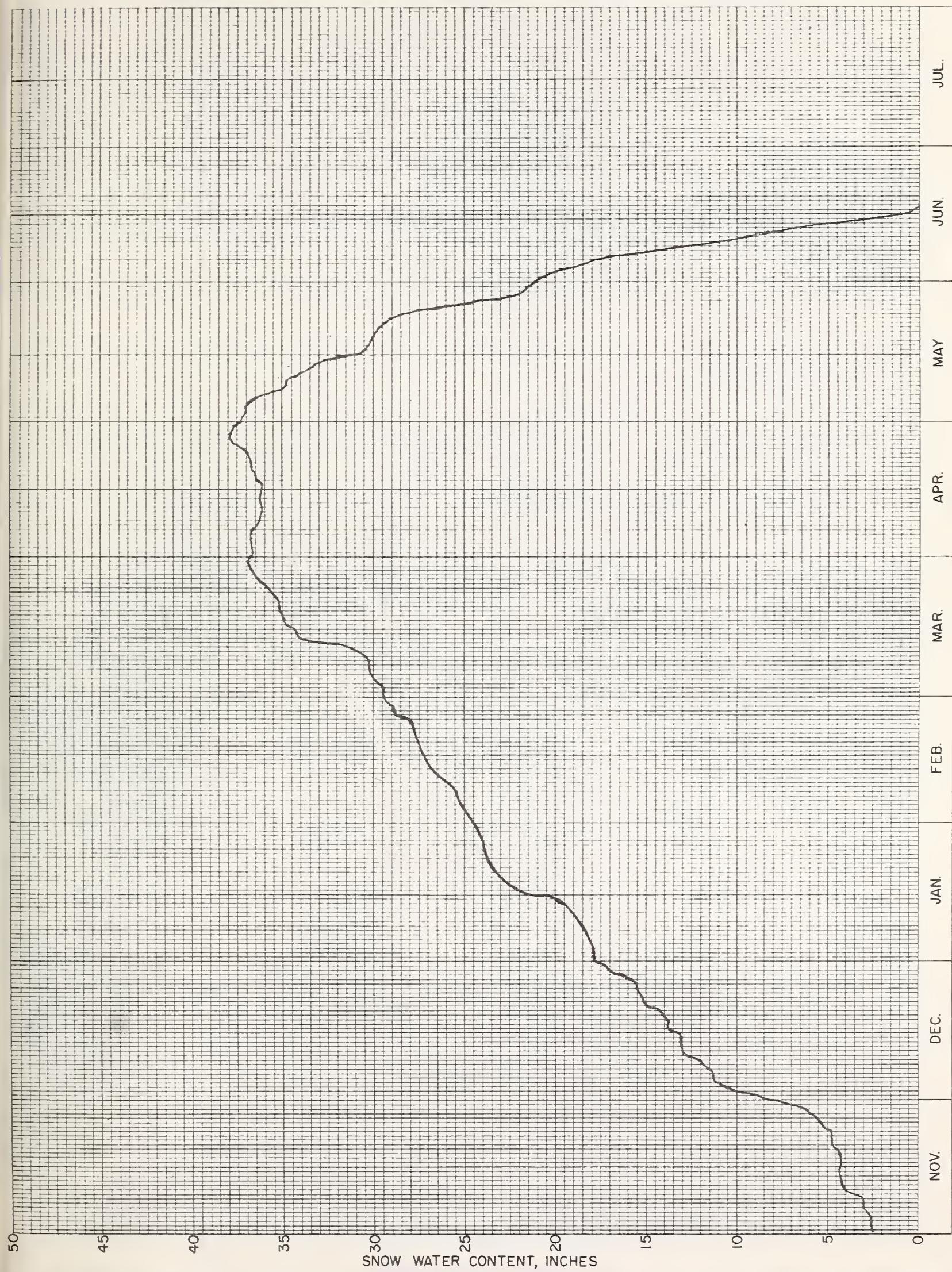
SNOW PILLOW DATA
WATER YEAR 1971

MADISON PLATEAU

No. 11E31

Elev. 7750

Drainage: Madison





SNOW PILLOW DATA
WATER YEAR 1971

WEST YELLOWSTONE

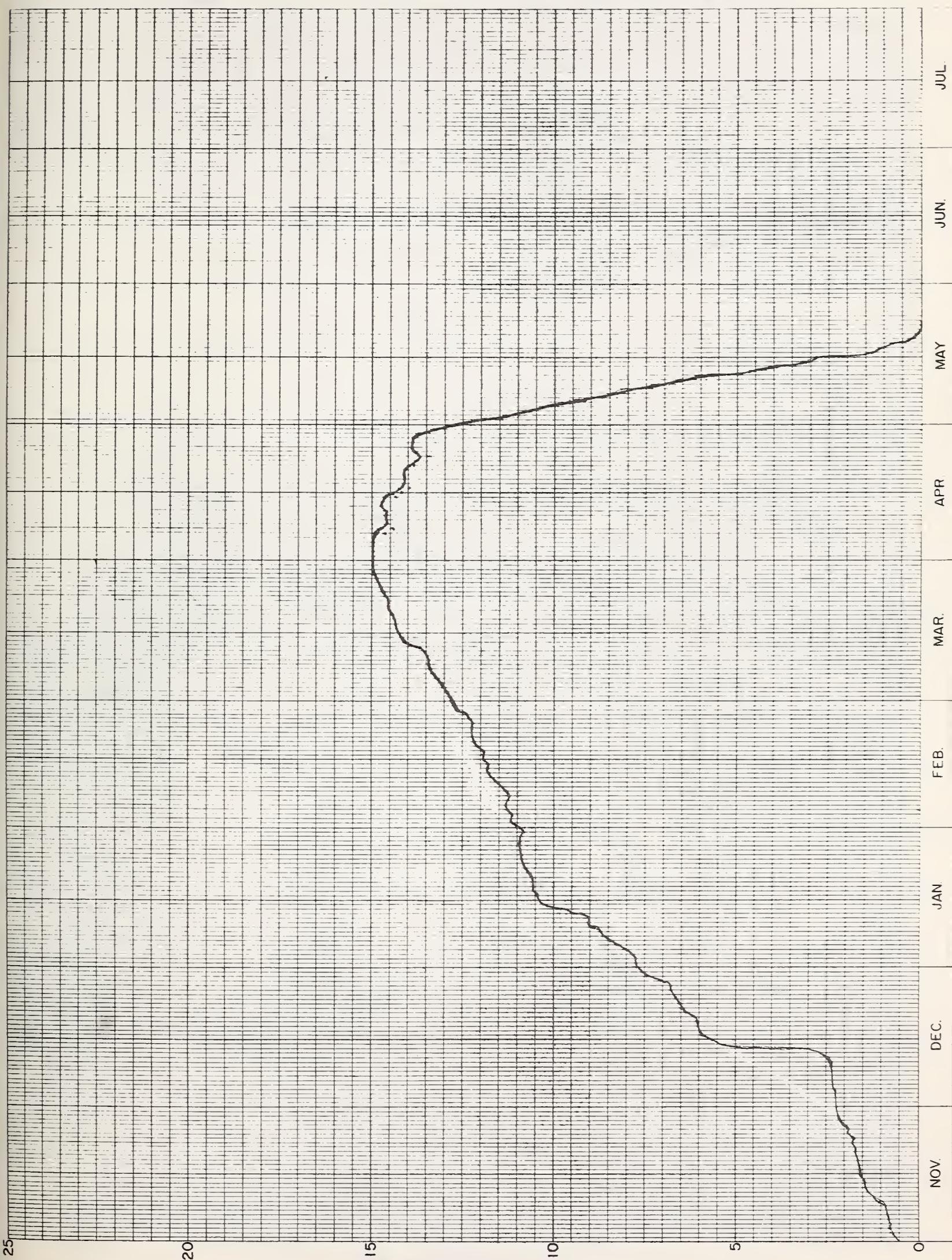
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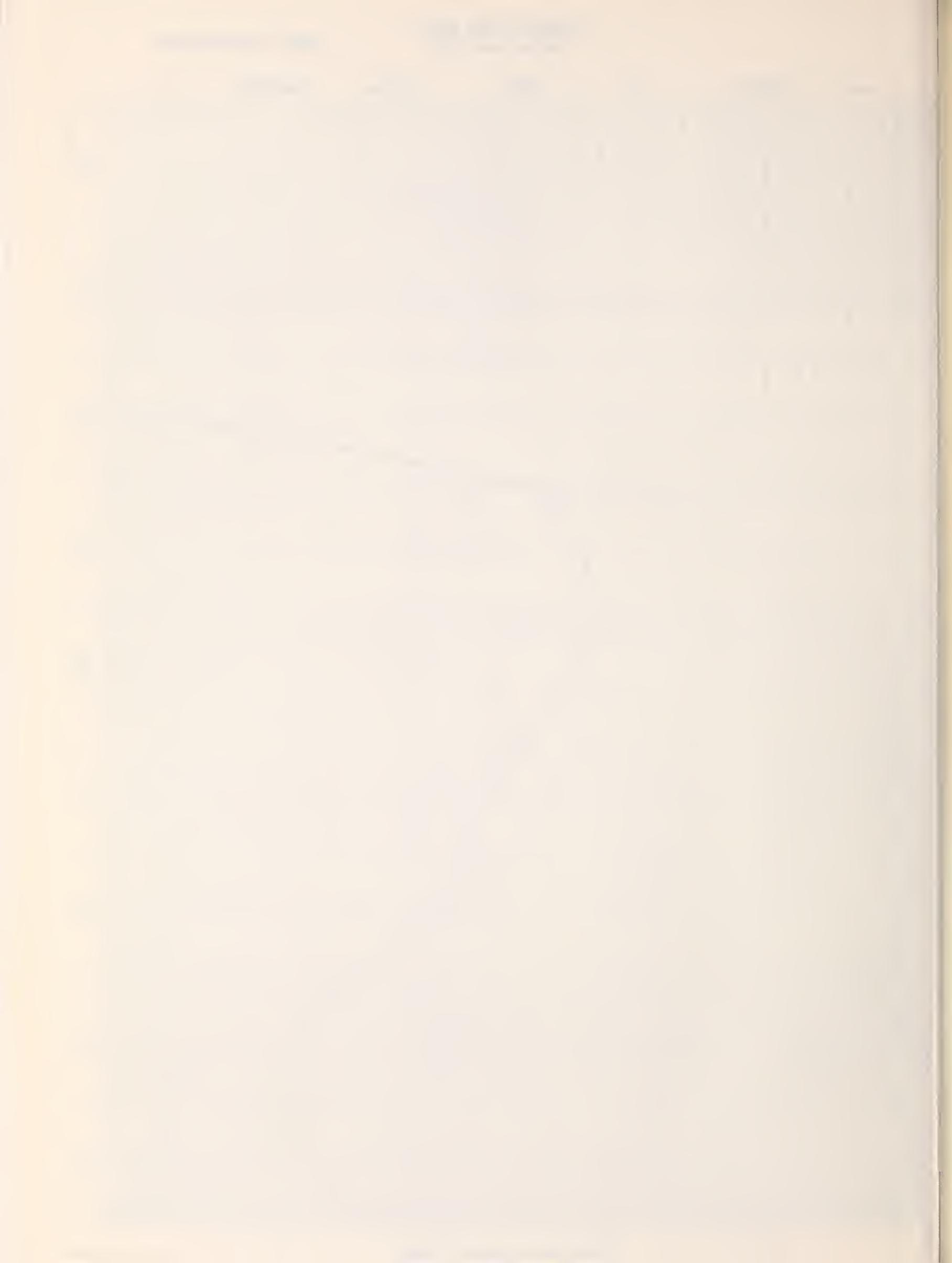
Elev.

6700

Drainage.

Madison

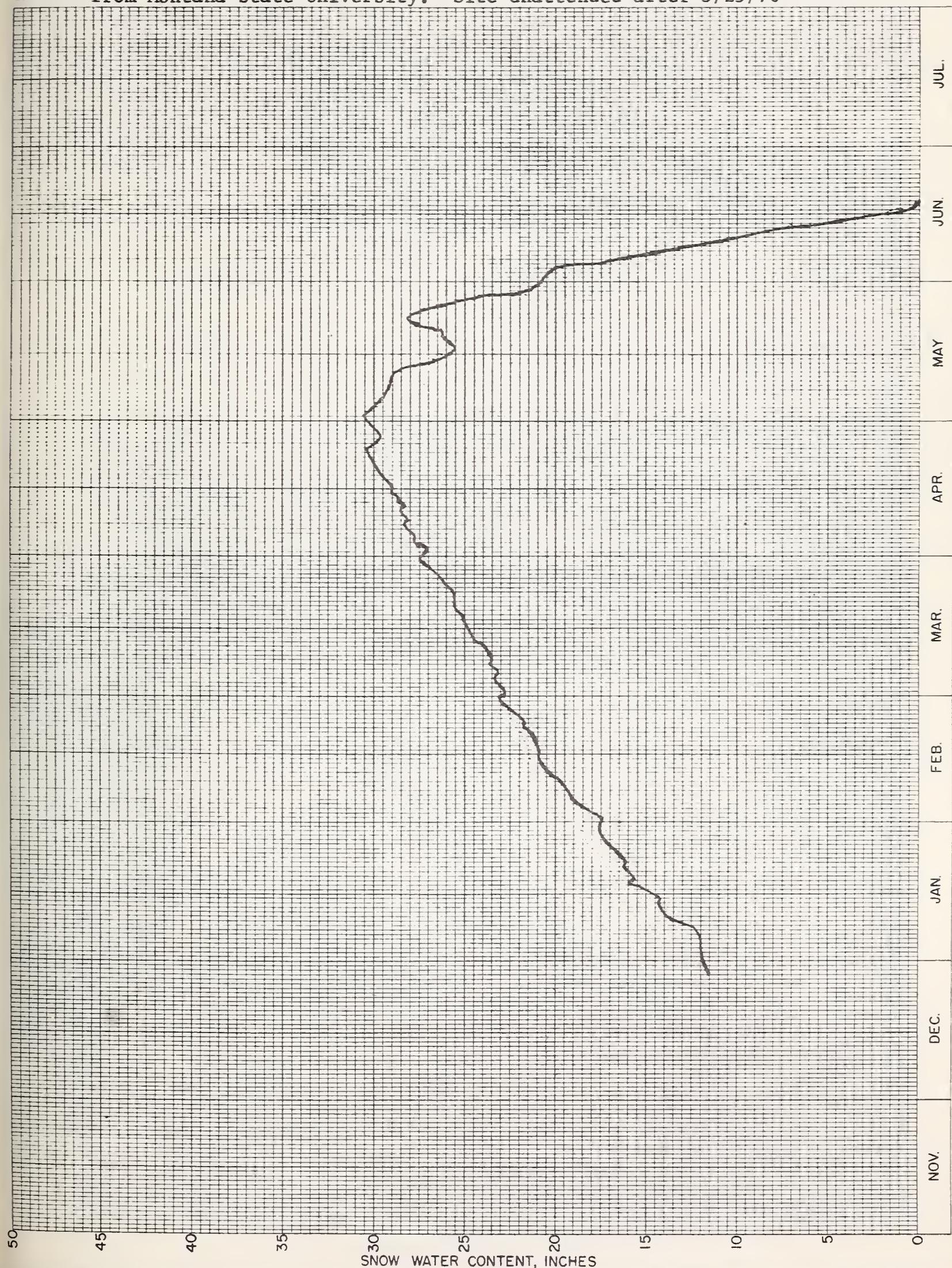




SNOW PILLOW DATA
WATER YEAR 1971

BANGTAIL

Record No. 10D20 Elev. 7900 Drainage: Gallatin
from Montana State University. Site unattended after 3/25/70





SNOW PILLOW DATA
WATER YEAR 1971

BRIDGER BOWL

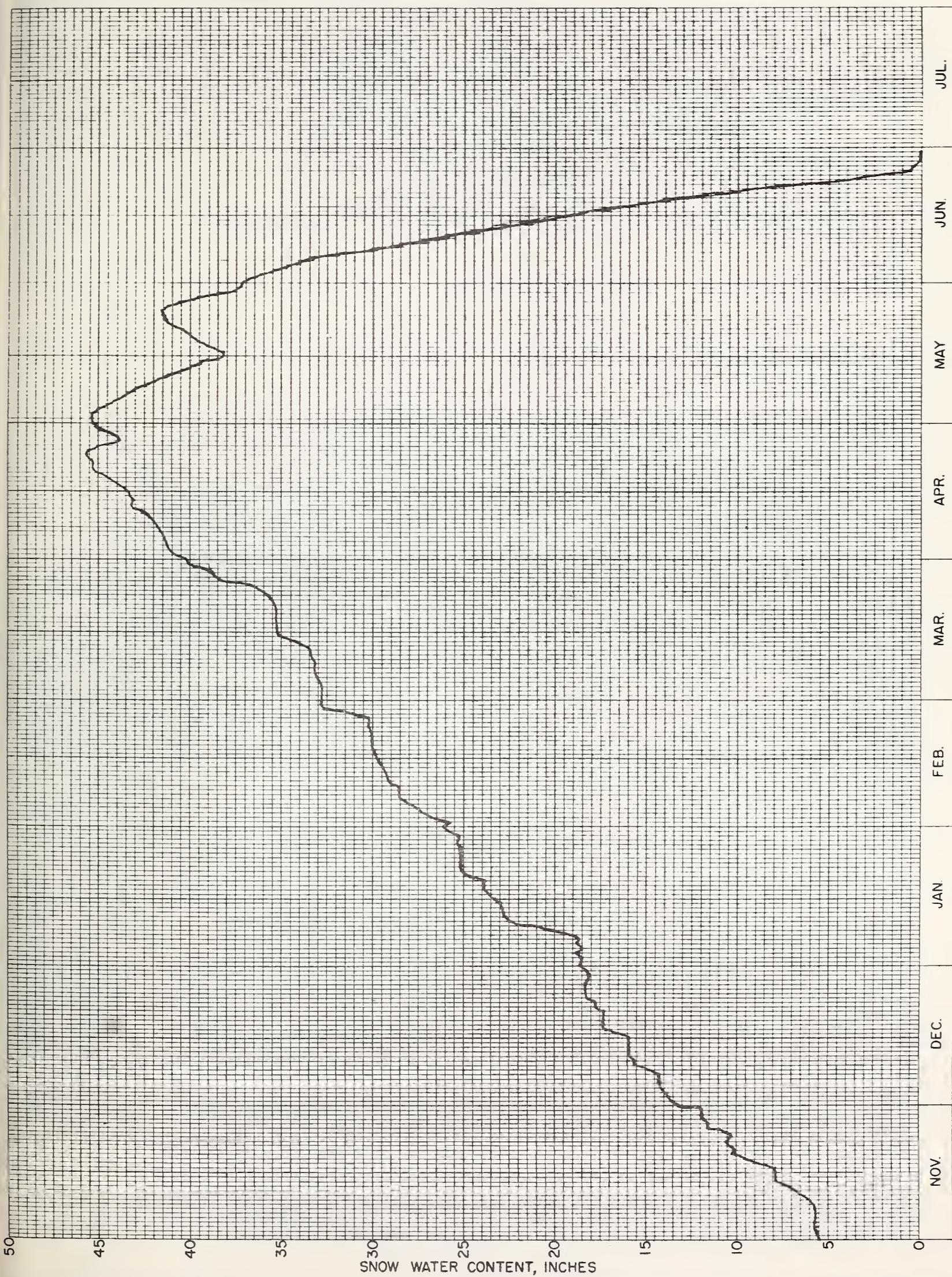
No. 10D15

Elev.

7250

Drainage:

Gallatin



SNOW PILLOW DATA
WATER YEAR 1971

CARROT BASIN

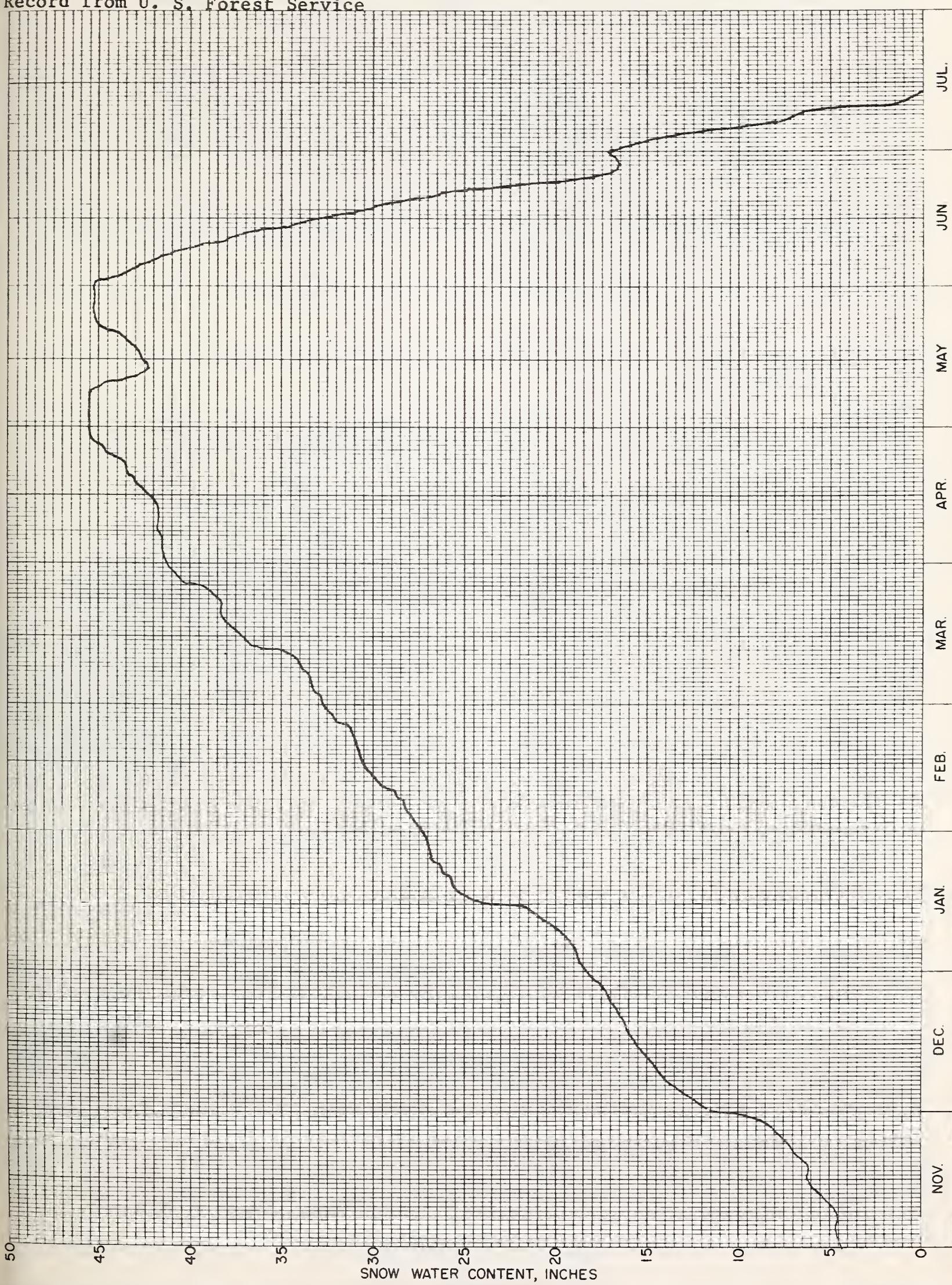
No. 11E29
Record from U. S. Forest Service

Elev.

9000

Drainage:

Gallatin





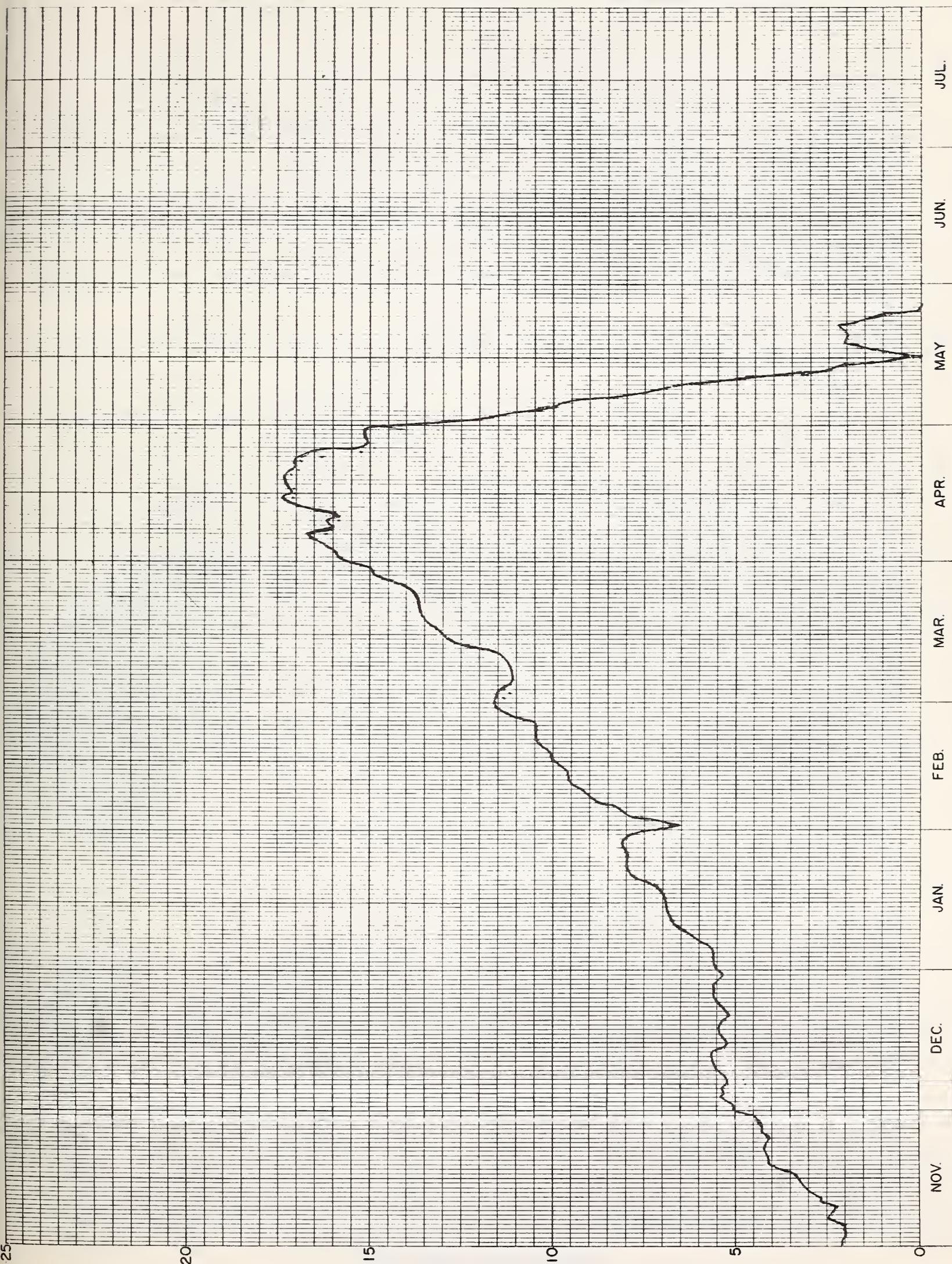
SNOW PILLOW DATA
WATER YEAR 1971

LICK CREEK

No. 10D13

Elev. 6860

Drainage. Gallatin



SNOW PILLOW DATA
WATER YEAR 1971

MAYNARD CREEK

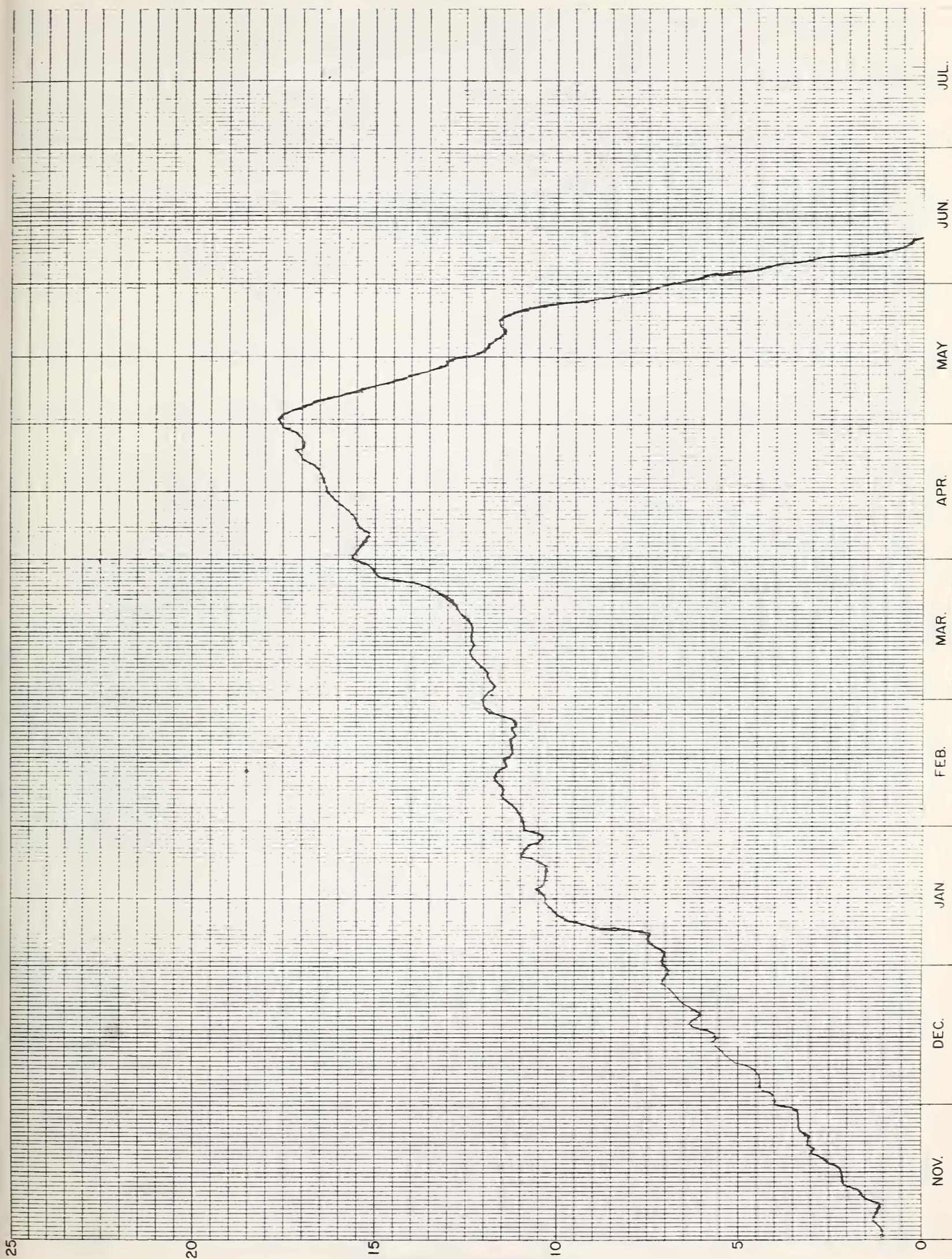
No. 10D18

Elev.

6210

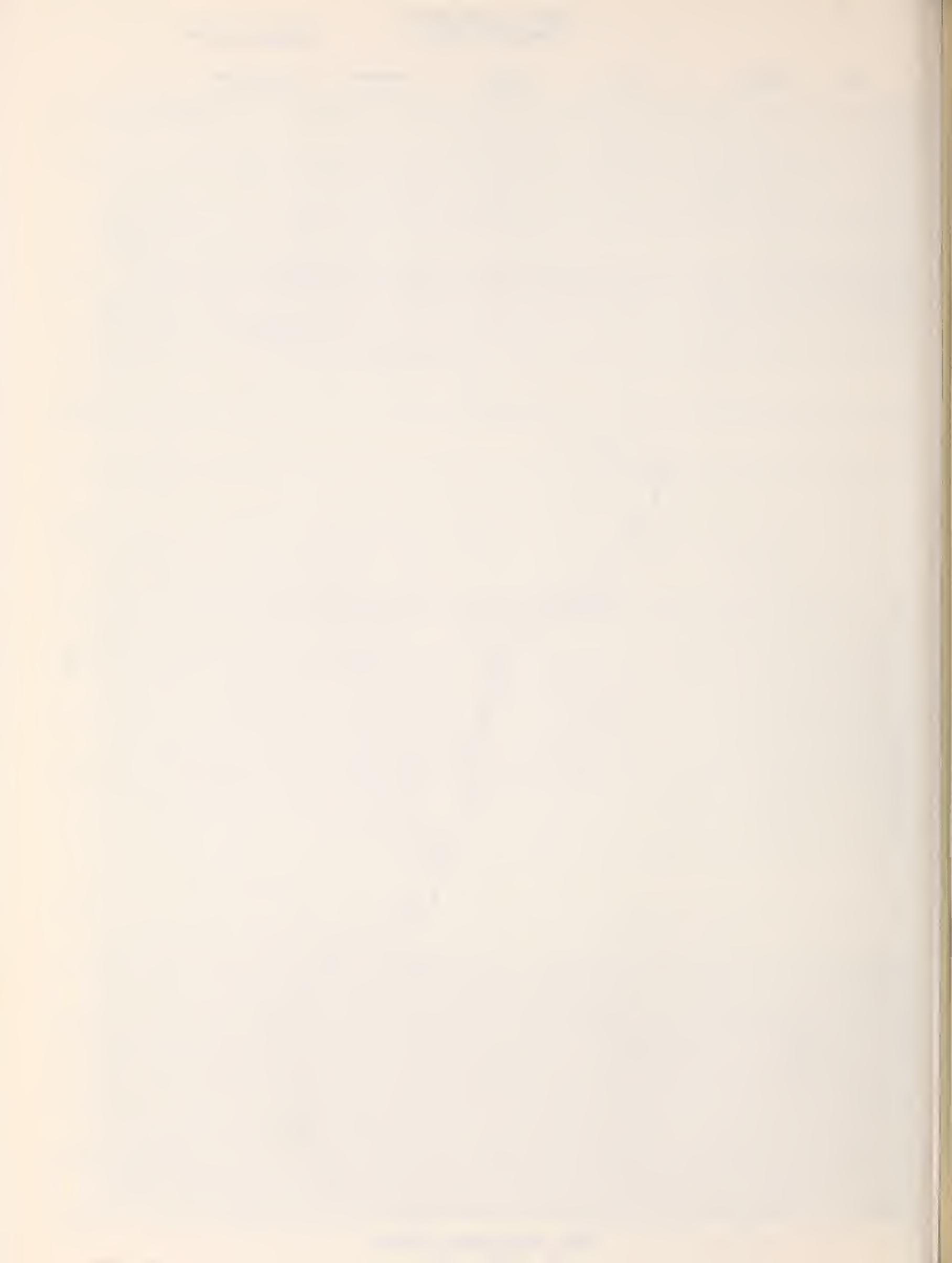
Drainage.

Gallatin



SNOW WATER CONTENT, INCHES

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SNOW PILLOW DATA
WATER YEAR 1971

SHOWER FALLS

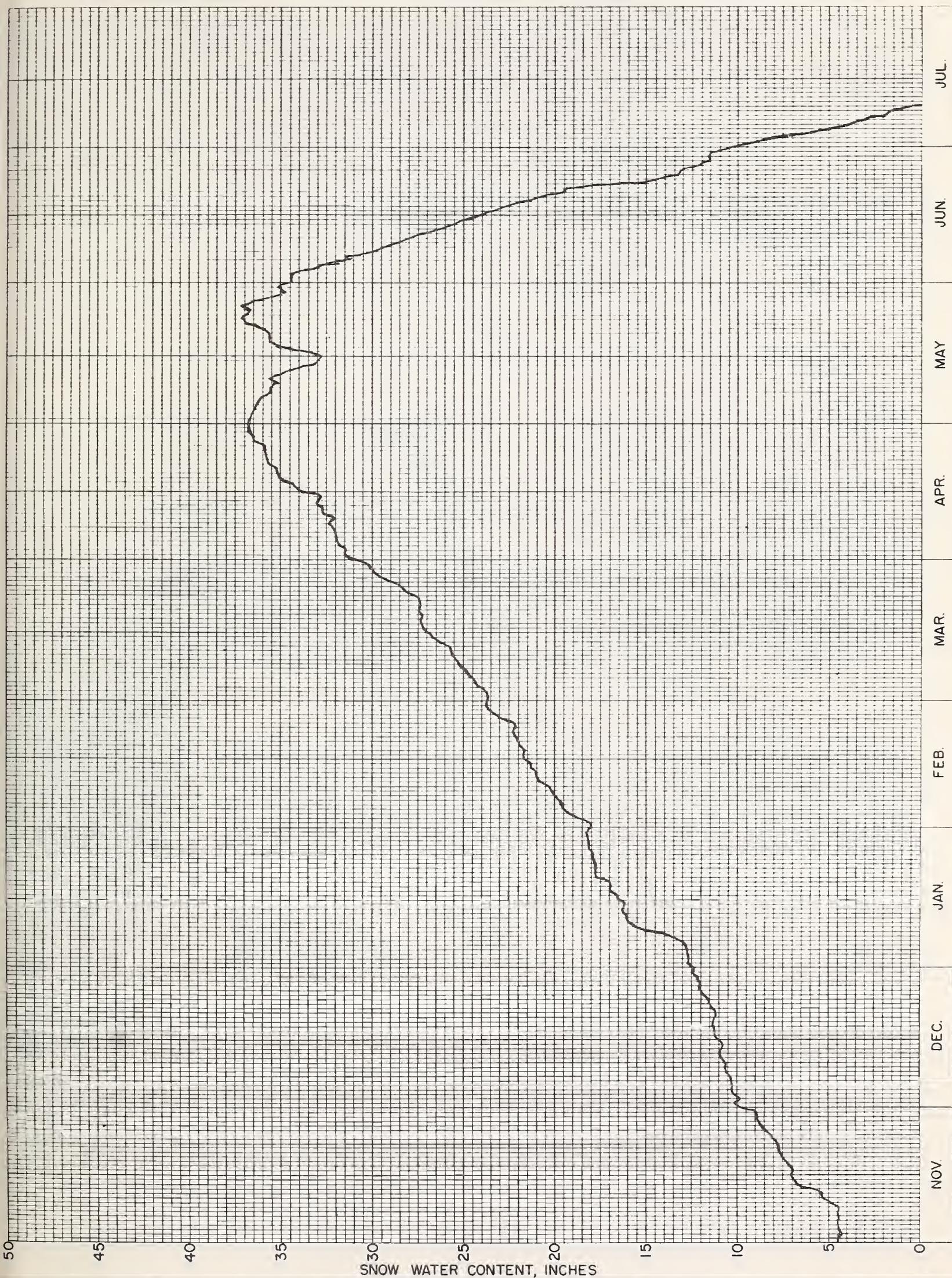
No. 10D16

Elev.

8100

Drainage:

Gallatin





SNOW PILLOW DATA
WATER YEAR 1971

TAYLOR PEAKS

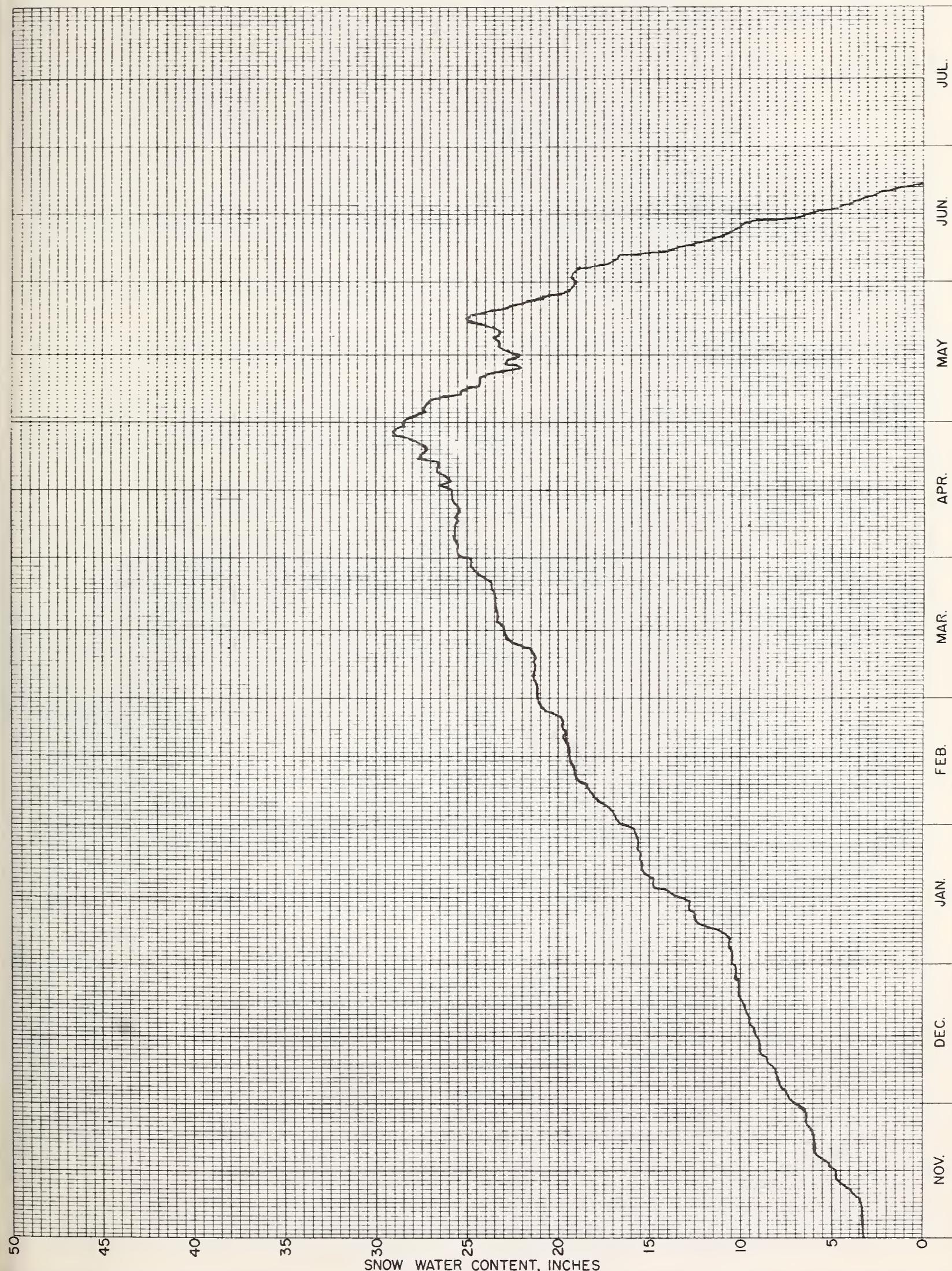
No. 11D13

Elev.

8500

Drainage:

Gallatin



SNOW PILLOW DATA
WATER YEAR 1971

DEADMAN CREEK

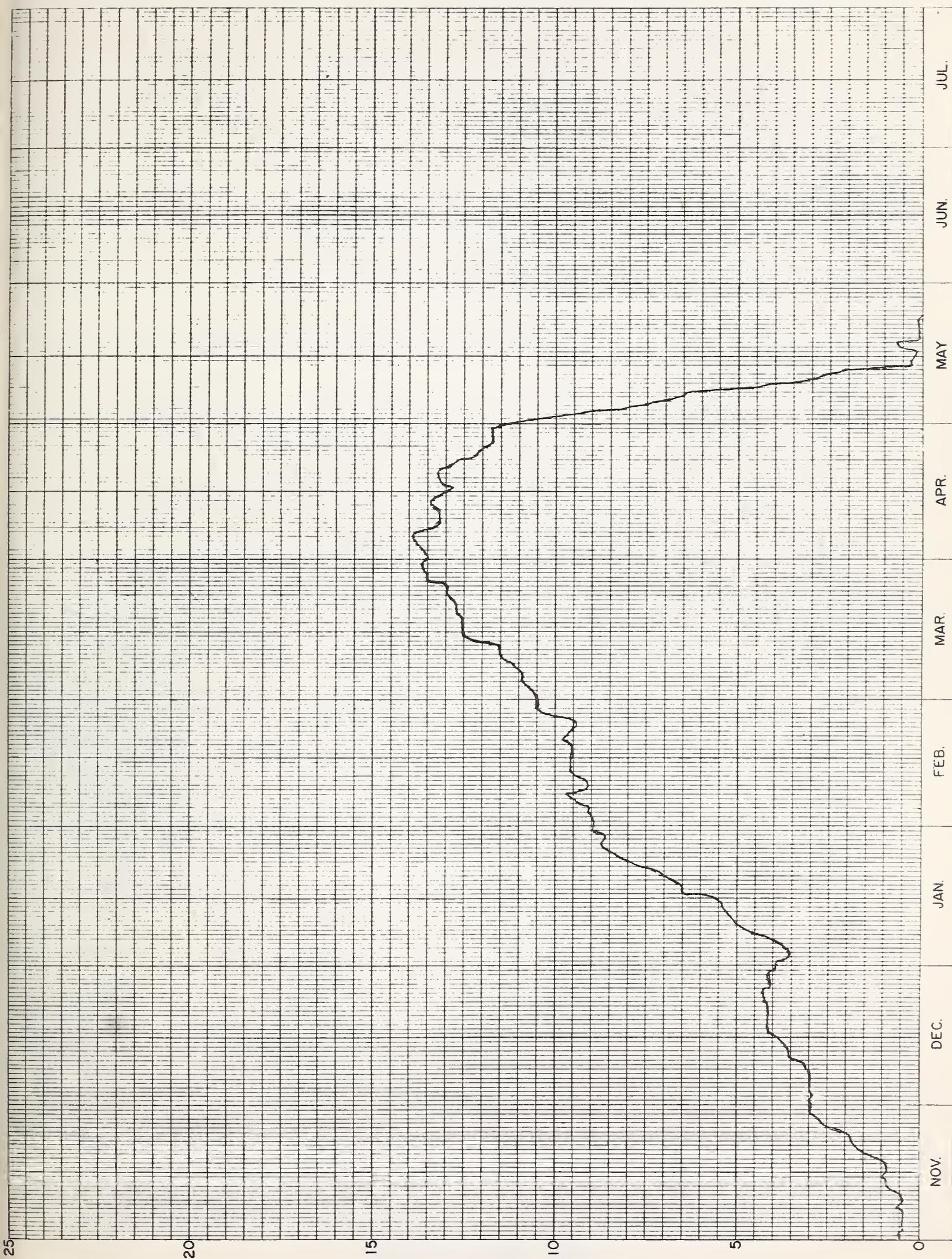
No. 10C09

Elev.

6450

Drainage.

Missouri Main Stem



SNOW PILLOW DATA
WATER YEAR 1971

ROCKY BOY

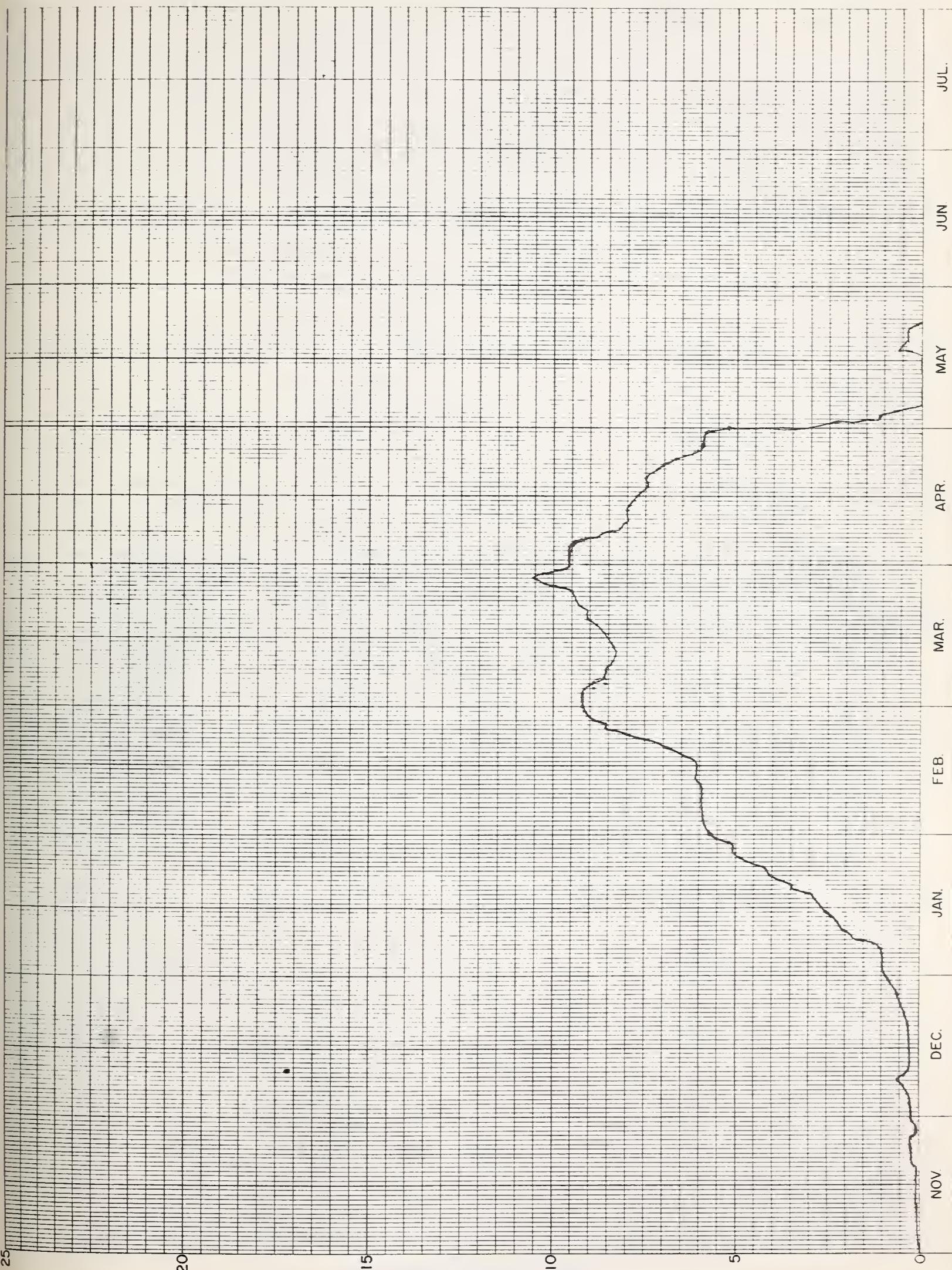
No. 9A01

Elev.

4700

Drainage.

Milk



SNOW WATER CONTENT, INCHES

SNOW PILLOW DATA
WATER YEAR 1971

MOUNT LOCKHART

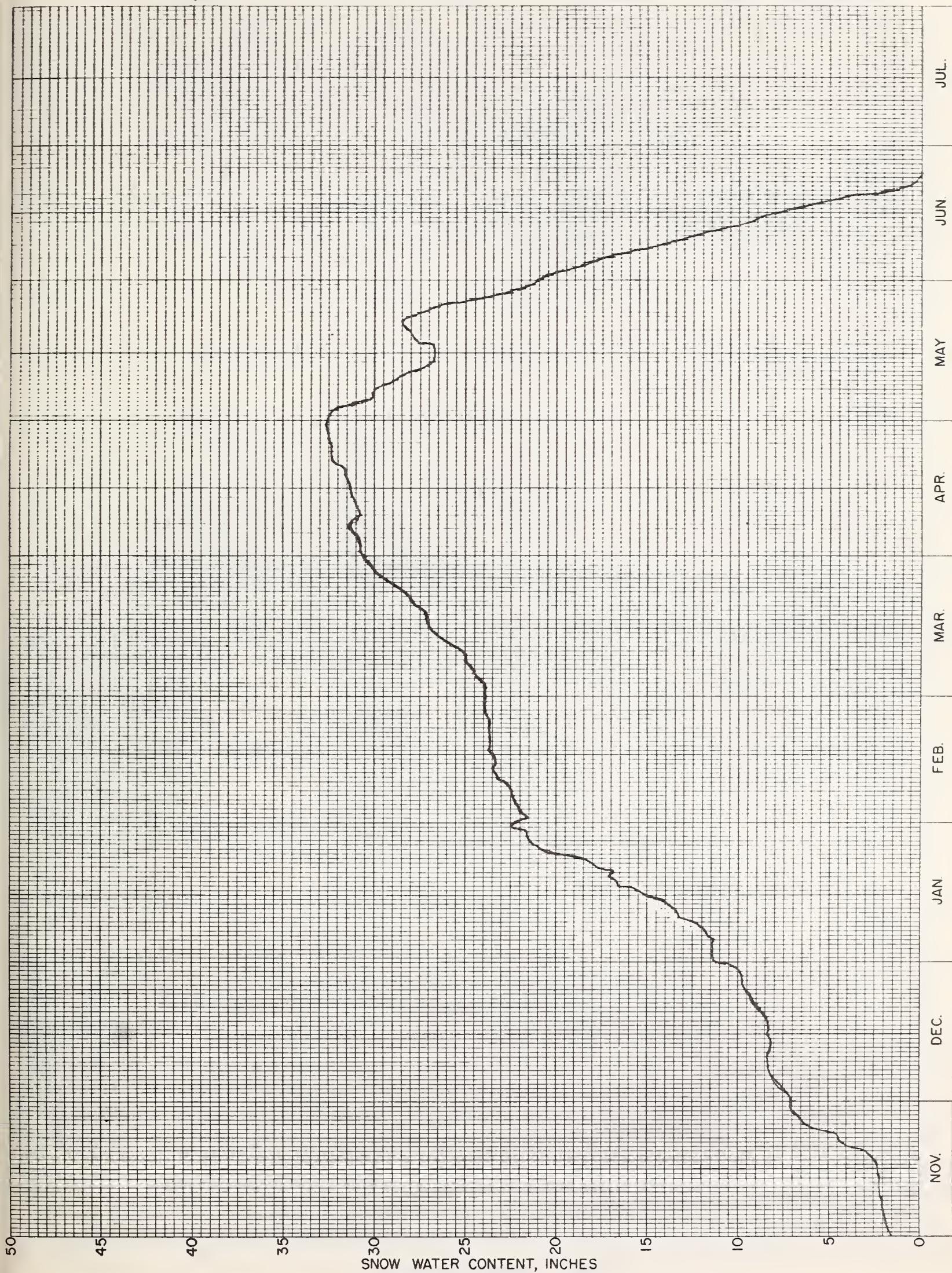
No. 12B12

Elev.

6400

Drainage:

Sun-Teton-Marias



SNOW PILLOW DATA
WATER YEAR 1971

WALDRON

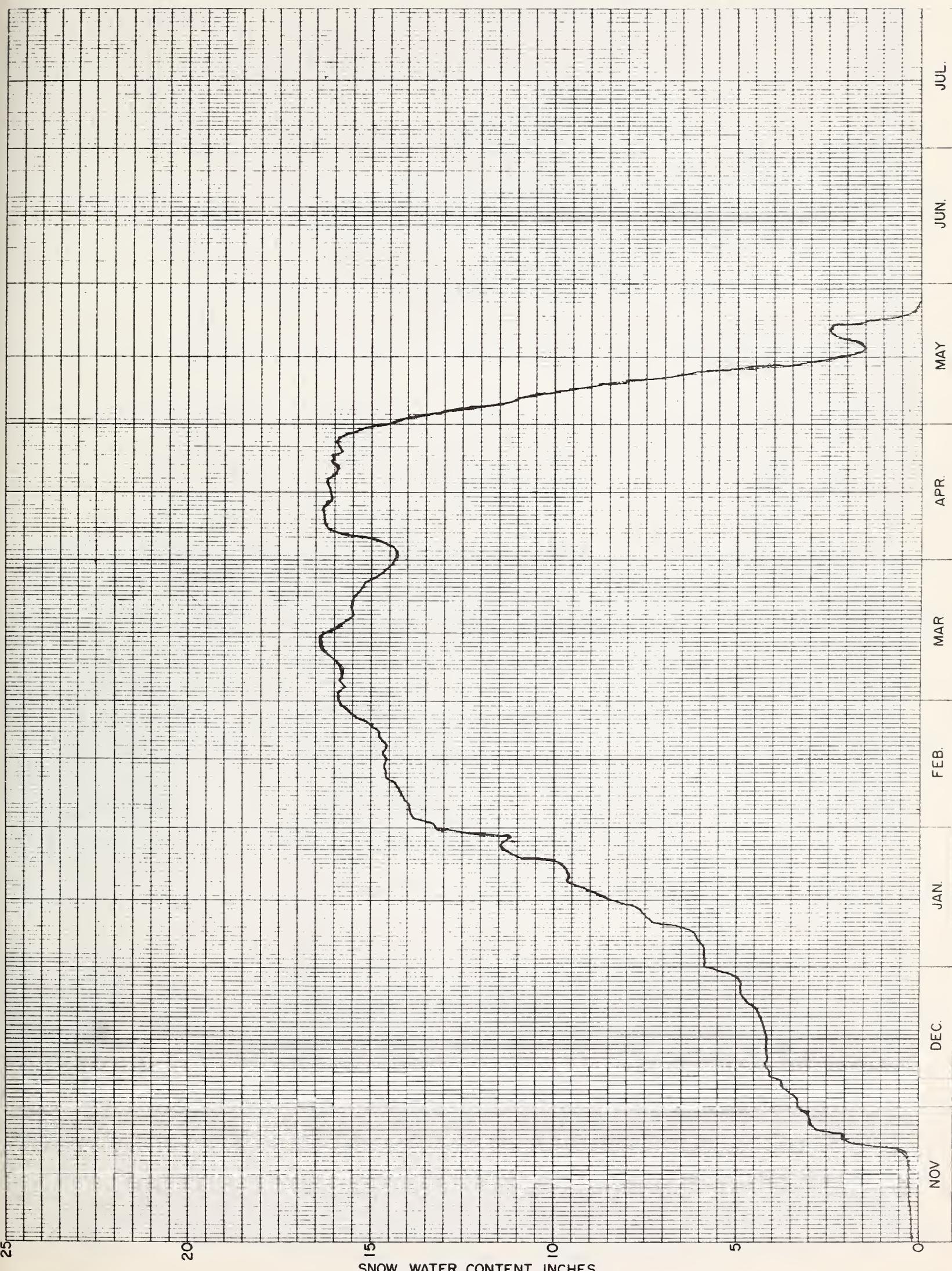
No. 12B13

Elev.

5600

Drainage.

Sun-Teton-Marias



SNOW PILLOW DATA
WATER YEAR 1971

SPUR PARK

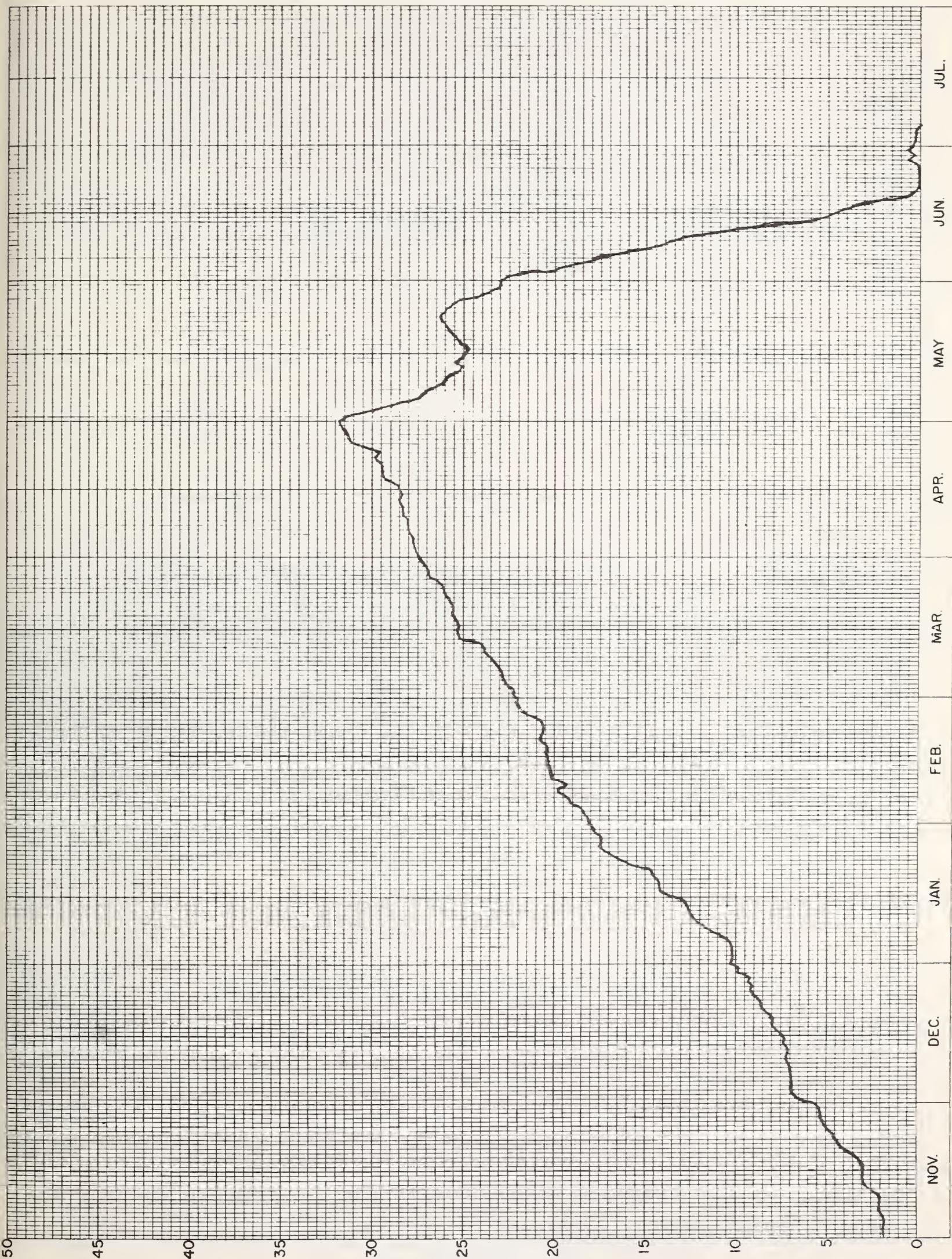
No. 10C06

Elev.

8000

Drainage:

Judith



SNOW PILLOW DATA
WATER YEAR 1971

FISHER CREEK

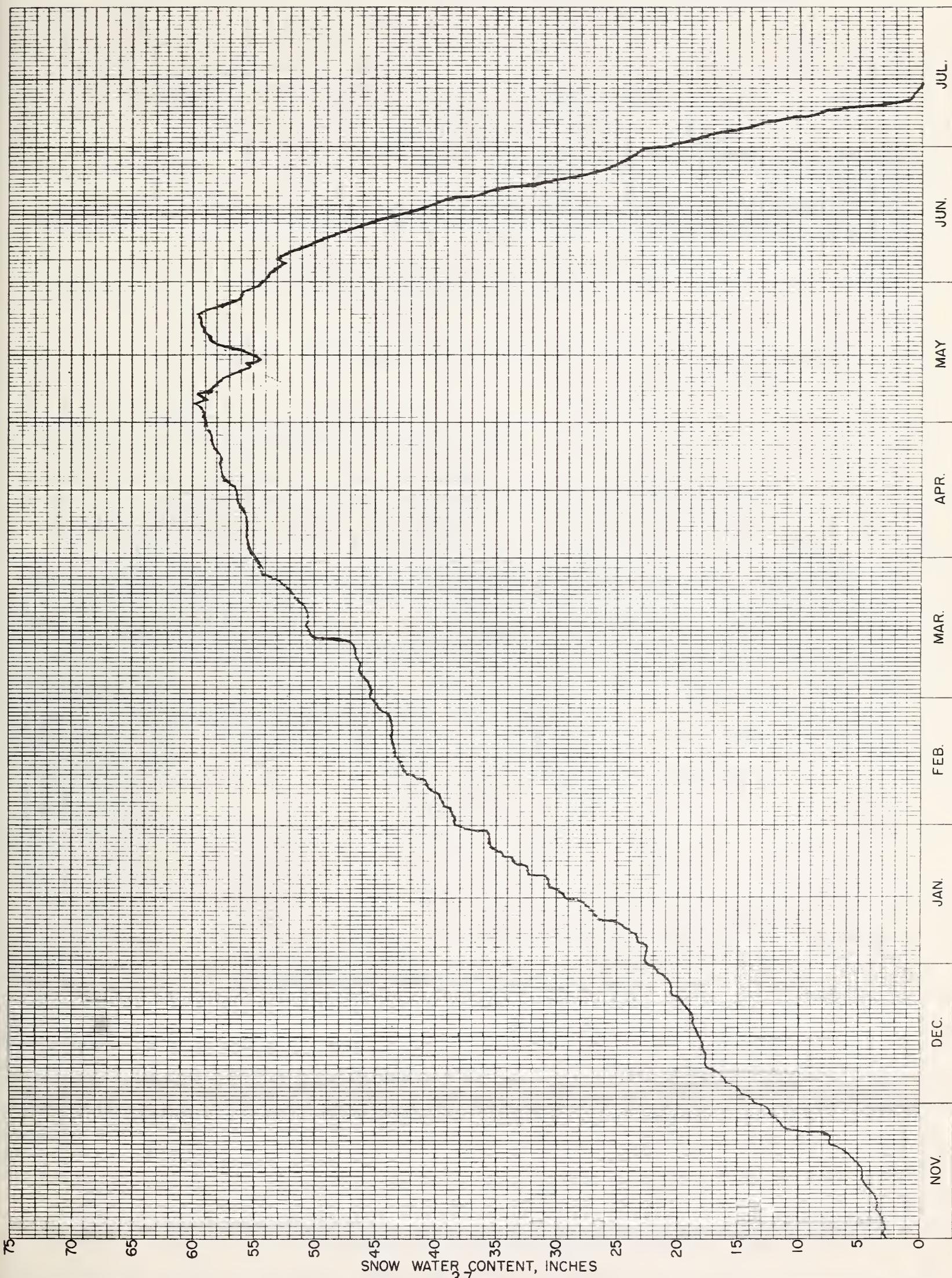
No. 9D06

Elev.

9100

Drainage:

Yellowstone



SNOW PILLOW DATA
WATER YEAR 1971

NORTHEAST ENTRANCE

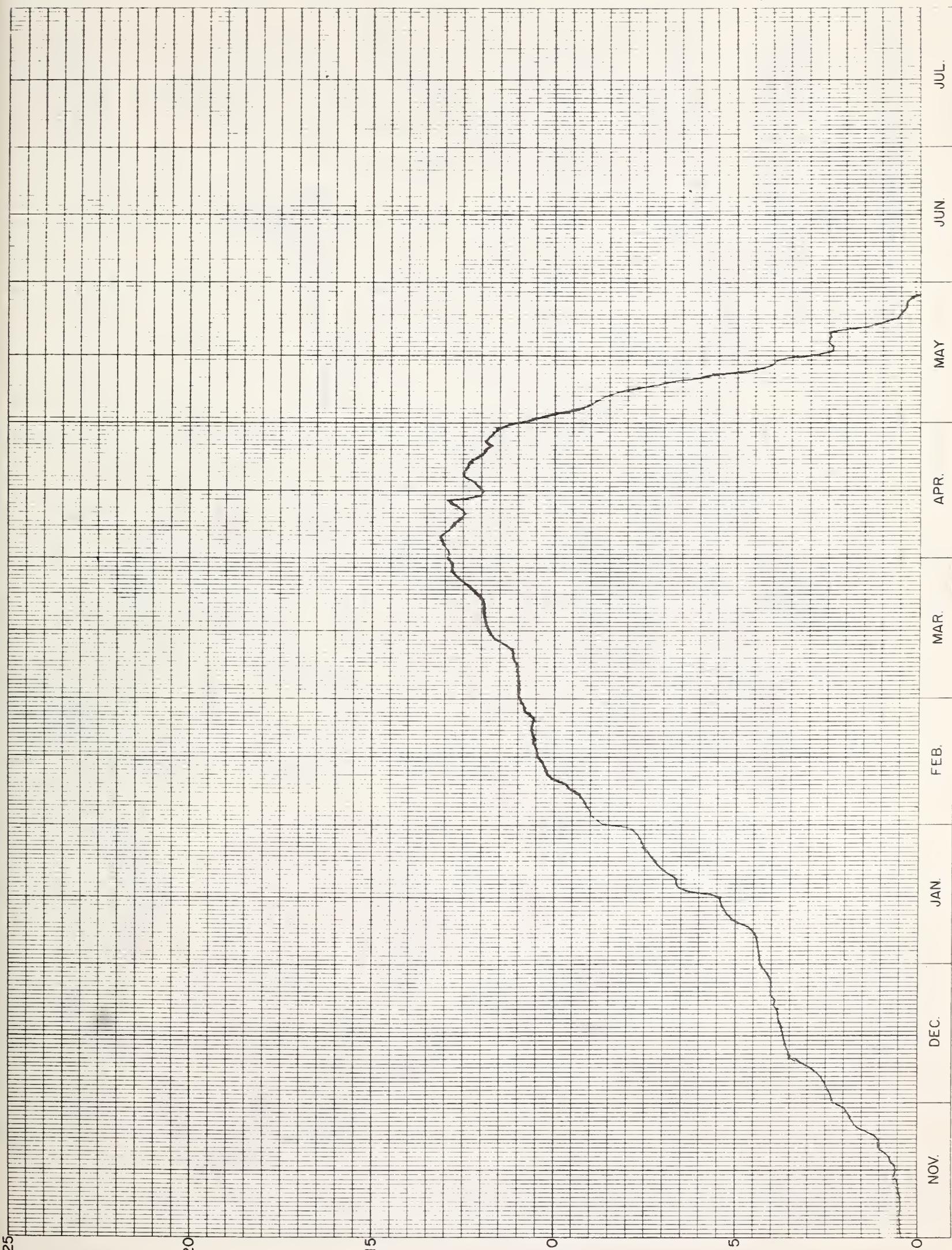
No. 10D07

Elev.

7350

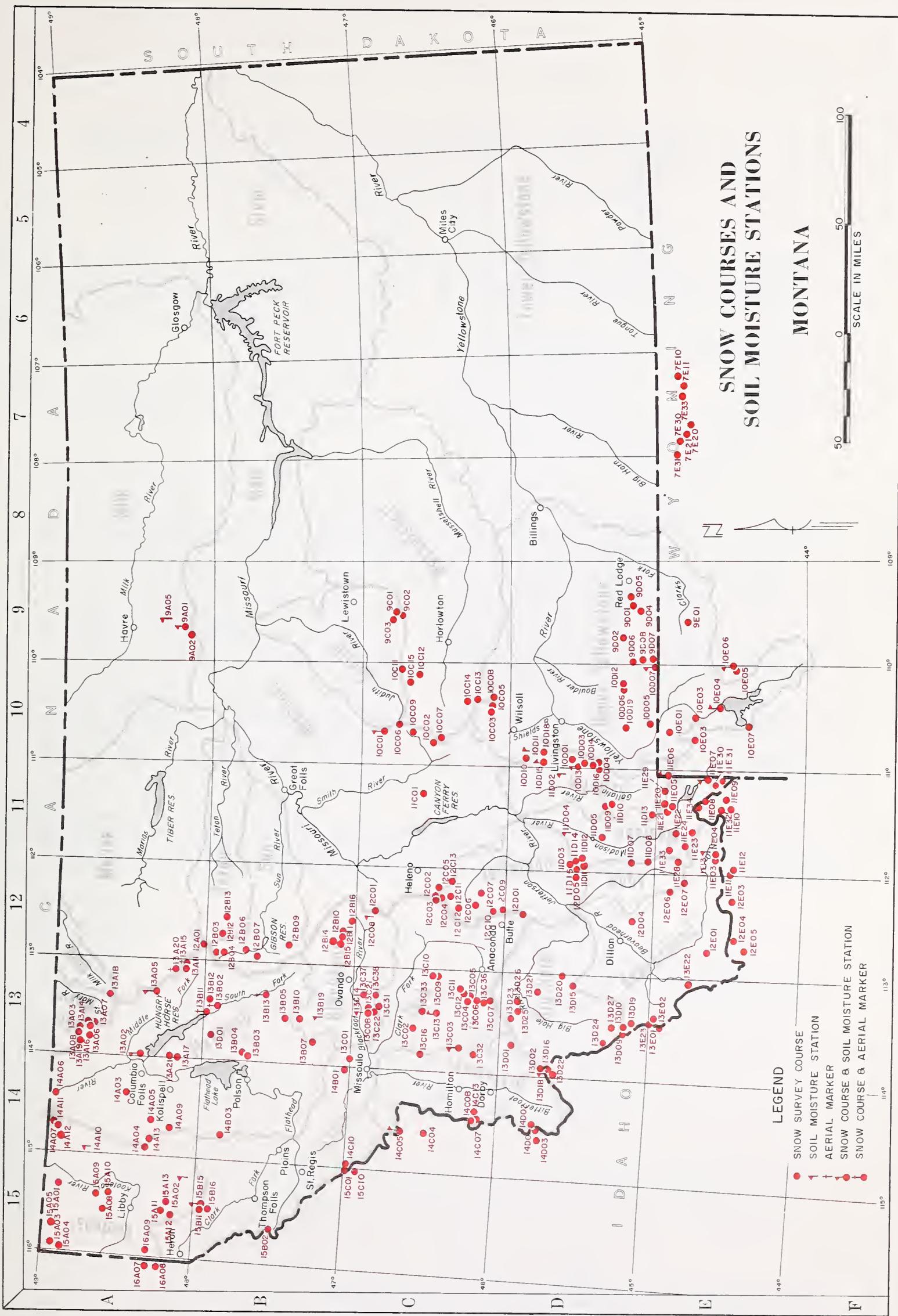
Drainage.

Yellowstone



SNOW WATER CONTENT, INCHES

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INDEX to MONTANA SNOW COURSES and SOIL MOISTURE STATIONS

SNOW COURSES

Drainage Basin & Snow Course	Number	Elev.	Sec.	Twp.	Range	Record Begun	Measuring Dates 1/	Meas. By 2/
COLUMBIA RIVER BASIN								
KOOTENAI RIVER								
Bald Eagle Peak	15A11	5700	6	27N	31W	1969	3,4,5,5 ₁ ,6	1
Banfield Mountain	15D08	5600	4	32N	31W	1969	2,3,4,5,5 ₁ ,6	1
Baree Creek	15A11	5500	31	26N	31W	1956	3,4,5,5 ₁ ,6	1
Barre Midway	15A11	4600	31	25N	30W	1965	3,4,5,5 ₁ ,6	2
Baree Trail	15A15	3800	12	32N	30W	1965	2,3,4,5,5 ₁ ,6	2
Bristow Creek	15A10	3900	12	30N	26W	1937	3,4,5	1,2
Brush Creek	15A04	5000	12	30N	26W	1969	2,3,4,5,5 ₁ ,6	1,2
Cedar Grove Timber	15A13	4100	35	28N	31W	1969	2,3,4,5,5 ₁ ,6	1
Davis Creek	15A05	4500	20	37N	32W	1969	2,3,4,5,5 ₁ ,6	1
Garter Creek	15A03	4300	1	36N	25W	1937	3,4,5,5 ₁ ,6	1
Graves Creek	15A03	4500	18	36N	25W	1969	2,3,4,5,5 ₁ ,6	1
Hawks Lake	15A03	6450	12	32N	33W	1969	2,3,4,5,5 ₁ ,6	1
Keele's Creek	15A09	3500	25	30N	35W	1969	2,3,4,5,5 ₁ ,6	1
Loaf & Soil	15A12	4800	5	27N	31W	1969	2,3,4,5,5 ₁ ,6	1
Poorman Creek	15A02	5100	31	28N	31W	1969	2,3,4,5,5 ₁ ,6	1
Red Mountain	15A01	6000	4	36N	25W	1969	3,4,5,5 ₁ ,6	1
Stahl Creek	15A12	6050	5	36N	25W	1969	3,4,5,5 ₁ ,6	1
Wessel Divide	15A07	5450	20	37N	32W	1937	3,4,5,5 ₁ ,6	1
FLATHEAD RIVER								
Saboo Park	14B03	5150	11	24N	25W	1961	3,4,5	1,5
Beaver Lake	15A11	5900	31	28N	18W	1961	3,4,5	1
Big Creek	15B03	6750	7	22N	18W	1961	3,4,5	6
Camp Mistry	15A02	5600	24	31N	18W	1937	1,2,3,4,5,6	1,2
Desert Mountain	15A02	5600	24	31N	19W	1969	2,3,4,5,5 ₁ ,6	1
Fatty Creek	13B04	5500	8	22N	18W	1962	3,4,5,	6
Flatop Mountain	13A19	6300	12	35N	18W	1968	4	1,6
Griffin Creek Divide	14A09	5150	11	28N	25W	1960	3,4,5	1,5
Ganitch Lake	13B12	6300	35	26N	14W	1964	3,4,5	1
Hell Roaring Divide	15A13	5770	35	32N	22W	1942	1,2,3,4,5,5 ₁ ,6	2
Noblock	13B13	4570	18	21N	13W	1951	1,2,3,4,5,6	1
Klukene	15A06	3890	14	30N	18W	1956	3,4	6
Loren Creek	15A05	4300	34	30N	18W	1937	1,2,3,4,5,6	3
Martas Pass	13A05	5250	8	19N	14W	1934	1,2,3,4,5,6	3
Mineral Creek	13A16	4000	29	35N	18W	1957	3,4,5	6
Roly Creek	13A16	3600	33	28N	19W	1970	3,4,5	1,2
North Fork Jocko	13B07	6330	3	25N	15W	1948	1,2,3,4,5,5 ₁ ,6	1
Spotted Bear Mountain	13B02	6300	9	25N	17W	1948	3,4,5	1
Trink's Lake	13B01	6100	3	26N	16W	1951	1,2,3,4,5	1
Twin Creek	13B11	3580	20	20N	15W	1948	3,4,5	1
Upper Holland Lake	13B05	6200	28	35N	17W	1948	3,4,5	1
CLARK FORK RIVER								
Black Pine	13C13	7100	26	8N	15W	1959	1,2,3,4,5,5 ₁ ,6	1
Combination	12B11	5600	7	8N	14W	1941	1,2,3,4,5,5 ₁ ,6	1
Copper Bottom	12B16	5200	15	15N	8W	1971	1,2,3,4,5	1,2
Copper Creek	12B14	6950	3	15N	9W	1962	1,2,3,4,5	1,2
Cotter Mine	12B10	5700	1	15N	9W	1962	3,4,5	1,2
Coyote Hill	12B11	6250	6	15N	9W	1962	3,4,5	1,2
El Dorado Mine	13C09	4200	12	18N	16W	1947	1,2,3,4,5	1,2
Fred Bear Pass	13C12	7800	23	8N	12W	1949	3,4,5	1,2
Gopher Camp	12B14	5950	1	15N	9W	1971	1,2,3,4,5	1,2
Goat Lake Creek	12B10	5700	3	15N	9W	1971	1,2,3,4,5	1,2
Goat Mine	12B11	6000	2	15N	9W	1962	3,4,5	1,2
Intergaard	13C04	6450	6	15N	13W	1936	2,3,4,5	8
Lubrecht Flame	13C03	4800	13	13N	14W	1971	1,2,3,4,5	8
Lucre Forest No. 3	13C12	5450	19	13N	14W	1951	1,2,3,4,5	8
Lucre Forest No. 4	13C22	4650	23	13N	15W	1951	1,2,3,4,5	8
Lucre Forest No. 6	13C08	4040	40	11N	14W	1951	1,2,3,4,5	8
Lucre Hydrot	13C37	4200	22	13N	14W	1971	1,2,3,4,5	8
Hart Lake Trail	13C11	6250	20	13N	13W	1968	1,2,3,4,5,5 ₁ ,6	1,2
Peterson Meadows	13C06	7200	22	4N	14W	1971	1,2,3,4,5	1,2
Red Lickon	13C12	7100	22	6N	13W	1958	3,4,5	1,2
Slidde Rock Mountain	13C02	7100	35	10N	16W	1937	3,4,5	1,2
Southern Cross #	13C05	6500	11	14N	27W	1936	2,3,4,5	1,2
Storm Lake	13C07	7200	19	4N	13W	1939	1,2,3,4,5	1
Stewart Mill	13C06	6500	19	13N	18W	1936	2,3,4,5	4
Stewart Mountain	13C01	7400	6	14N	18W	1936	1,2,3,4,5,5 ₁ ,6	8
TV Mountain	14B01	6800	33	15N	19W	1936	1,2,3,4,5,5 ₁ ,6	8
BITTERROOT RIVER								
Ashrose	13C16	6480	28	9N	18W	1960	3,4,5	1
Coyote Meadow Trail	13C32	7000	20	12N	17W	1969	3,4,5	1
East Fork R.S.	13D01	5400	16	2N	17W	1937	3,4,5	1
Glibona Pass	13D02	7100	4	25N	19W	1960	3,4,5	1
Lost Horse	14C07	5400	5	4N	23W	1960	3,4,5	1
Nez Perce Camp	14D02	5380	19	15N	19W	1956	1,2,3,4,5,5 ₁ ,6	8
Saddle Mountain	14D01	6720	25	15N	24W	1937	3,4,5	1
Trollville Creek	14C13	6400	34	32N	18W	1969	3,4,5	1
Twin Lakes	14C08	6510	32	32N	19W	1960	1,2,3,4,5,5 ₁ ,6	1
ST. MARY RIVER BASIN								
Nudson Bay Divide	13A18	5800	24	34N	14W	1962	3,4,5	3,9
Icerberg Lake	13A03	5600	1	35N	17W	1937	3,4,5	5
Icecapine Lake No. 9	13A16	6800	22	35N	16W	1935	5	5
Mount Allan No. 7	13A07	5700	27	35N	16W	1922	5	5
Pleasant Pass No. 6	13A06	5300	27	4S	2W	1922	5	5
Platmanian No. 8	13A08	5800	36	36N	17W	1937	5	5
MISSOURI RIVER BASIN								
BEAVERHEAD RIVER	13D10	7500	12	8S	16W	1948	1,2,3,4,5,5 ₁ ,6	1,2
Bloody Dick	12D04	7400	22	8S	13W	1953	2,3,4,5	1
Carter Creek	13E22	8400	24	12S	13W	1965	3,4,5	2
Dad Creek	13D22	8500	11	4S	12W	1935	3,4,5	1
Elk Horn Springs	13D15	8500	21	4S	12W	1935	3,4,5	1
Goldstone	13D09	8100	11	8S	16W	1948	3,4,5	1
Lakeview Canyon	13D04	6910	27	14S	2W	1948	3,4,5	1
Lakeview Ridge	13D03	6910	3	14S	2W	1948	3,4,5	1
Rocky Creek	13D08	6910	27	14S	2W	1948	3,4,5	1
UPPER YELLOWSTONE RIVER								
Gettys Peak	13E01	7800	9	10S	15W	1968	3,4,5	1
Independence	13E02	7800	4	10S	15W	1948	3,4,5	1
Mill Creek	13E01	7850	18	14S	15W	1948	3,4,5	1
Monument Peak	13E02	7850	18	14S	15W	1948	3,4,5	1
Northeast Entrance	13E07	7800	13	10S	15W	1907	3,4,5	1
Porcupine R.S.	13E00	8000	10	14S	15W	1900	3,4,5	1
Scalpewa	13E01	8000	14	10S	15W	1900	3,4,5	1
South Fork Shelds	13E02	7900	14	12S	15W	1900	3,4,5	1
Timberline Creek	13E04	8000	9	14S	15W	1900	3,4,5	1
West Rosebud	13E02	7950	9	14S	15W	1900	3,4,5	1
White Mill	13E01	8000	24	14S	15W	1900	3,4,5	1
SOL MOISTURE STATIONS								
COLUMBIA RIVER BASIN								
UPPER YELLOWSTONE RIVER (continued)								
Gettys Peak	9005	7800	26	7S	19E	1961	1,2,3,4,5	1
Independence	9005	7850	21	7S	19E	1960		

Agencies and Organizations Cooperating in Montana Snow Surveys

U. S. Forest Service
Region I, Missoula, Montana
Montana Forests and Ranger
Districts

U. S. Geological Survey
Helena, Montana
Portland, Oregon

U. S. Army Corps of Engineers
Portland, Oregon
Seattle, Washington
Walla Walla, Washington
Omaha, Nebraska

U. S. Indian Irrigation Service
St. Ignatius, Montana

U. S. Weather Bureau
Helena, Montana
Portland, Oregon
Kansas City, Missouri

U. S. Bureau of Sports Fisheries
and Wildlife
Red Rock Lakes Refuge
Monida, Montana

U. S. Bureau of Reclamation
Billings, Montana
Boise, Idaho

U. S. Bonneville Power Administration
Portland, Oregon

U. S. Soil Conservation Service
Montana, Wyoming, Idaho
Soil and Water Conservation Districts
Montana Counties

U. S. National Park Service
Yellowstone National Park
Glacier National Park

Montana Power Company
Butte, Montana

Montana Water Resources Board
Helena, Montana

North Montana Branch Station
Agricultural Experiment Station
Havre, Montana

Montana State University
Agricultural Experiment Station
Bozeman, Montana

University of Montana
School of Forestry
Missoula, Montana

Water Rights Branch, Dept. of
Lands and Forests
Victoria, British Columbia

Department of Energy, Mines and
Resources
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